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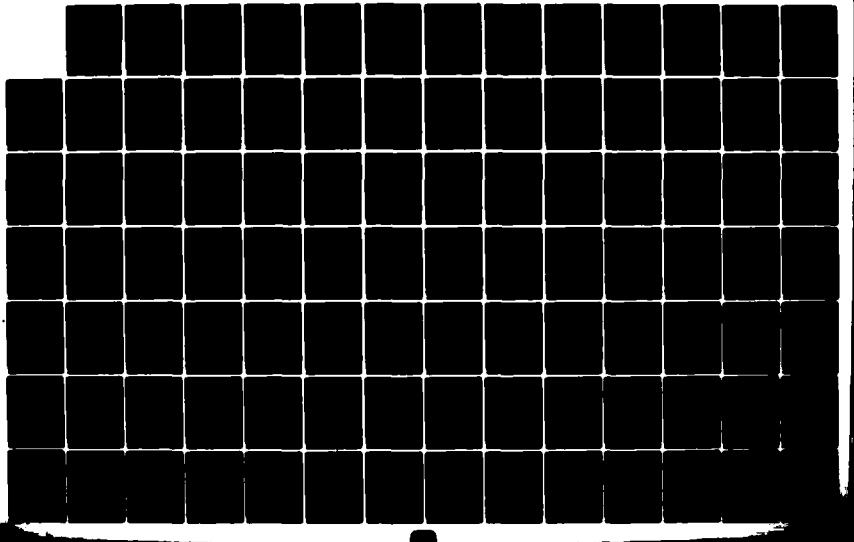

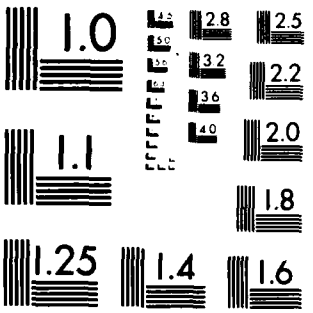

AN ADMINISTRATIVE ANALYSIS OF A HOSPITAL BASED MENTAL HEALTH OUTPATIENT SERVICE: A CASE STUDY

BY

RICHARD F. WELTZIN, JR.

M.S. University of Maine 1971

M.B.A. University of North Dakota 1974

An Essay Presented to

The Faculty of the Department of Epidemiology and Public Health

Yale University

In Candidacy for the Degree of

Master of Public Health

1984

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DIGEST

This paper is an administrative case study of a mental health outpatient service functioning within the framework of a community general hospital. Data from existing sources were combined in unique ways to analyze patient sociodemographics, staff productivity, unit costs, and the overall financial solvency of the program.

The typical patient can be sociodemographically described as an unmarried white female between eighteen and thirty-four years of age. The average patient is Catholic, lower income level, and has had psychiatric treatment in the recent past.

Analysis showed that although staff productivity had increased substantially over the past three years as measured in patient visits per 100 staff hours, there are indications that it was lower than that of other hospital-based psychiatric clinics in the state.

The financial analysis showed that large low-income allowances, bad debt write-offs, and accounts receivables substantially reduced revenues from operations. Net revenues from operations did not cover the direct operating costs of the clinic, resulting in substantial operating losses.

The hospital's administration will use these and other results to formulate new goals and objectives for this program. Portions of this study will be replicated in the future to measure progress and improvement.

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

PART I

INTRODUCTION

During the past two decades, mental health services have changed dramatically and the administration of these services has grown more complicated and difficult. Today, mental health programs are spending more money, employing more people, and serving more patients in more ways than ever before.[1] The typical mental health organization in the 1980s is a complex, decentralized service with multiple levels of accountability. This trend toward increased complexity is likely to describe the delivery of mental health services in the future as well. However, it is generally recognized that this increase in complexity has not been accompanied by the necessary administrative expertise.[2] As a result, the potential of greater resources and advanced clinical knowledge is hampered by administration that was known to be inadequate long ago.

ADMINISTRATION

The need to increase the effectiveness of administration in mental health is widely accepted.[3,4] This is one of the few issues in the field on which there is very little disagreement. Little progress has been evident, however, and the administrative ability gap is said to have grown wider as mental health services continue to expand in size and

complexity.[5]

Saul Feldman has identified several reasons why an adequate solution to this problem has not been found.[6] First, mental health services are generally administered by mental health professionals with little knowledge or experience in administration. They are often promoted to executive positions by virtue of their seniority or clinical ability. They are attracted to administration by the salary, the status, and the prospect of increased power. On the other hand, trained administrators may have little knowledge of or identification with the field of mental health.

Second, Feldman indicates that there is a paucity of useful literature on administration in mental health. While the literature in other fields does have some relevance for mental health, it is not directly transferable to the mental health setting in most cases. The necessary adaptation has not taken place, thus making it difficult for the individual administrator to benefit from the work in other related areas.

A third reason attributed to the slow development of good administration in mental health is the nature of the field itself. Mental health administration has not been well-defined due to the broad and varied nature of the subject matter. It is normative and defies neat, precise measures despite the advances in quantitative analysis and computer technology. Many in the field of mental health administration express the view that it is sufficiently different from administration in other fields so as to be little understood and difficult to conceptualize.[7]

A fourth reason, according to Feldman, is the lack of training programs. The difficulties in defining the field combined with, until very recently, the lack of a specific literature have prevented the development of widespread training programs in mental health administration. Neither a traditional administrative approach nor a purely clinical approach is sufficient for the effective fulfillment of the task of developing the organizational leadership required in mental health organizations. An approach that combines executive and clinical skills is required.[8]

Today, mental health services seem to be characterized by the following developments: increased scope of services, larger and more diverse staffs, more complex organizational patterns, multiple funding sources, increased coordination with other services, closer involvement with government at all levels, and greater community involvement. While several of these characteristics have been most prominent in the community mental health centers, they are also prevailing in other mental health services, such as general hospital based services as well. As a result of these new directions, psychiatrists, psychologists, and other professionals in positions of major responsibility in mental health facilities are finding themselves faced with major problems for which their professional training has not adequately equipped them.[9]

In recent years great strides have been made toward the recognition of mental health as an integral part of comprehensive health care. In most communities the public looks to the general hospital as a major source of this care.

Increasingly, the hospital is viewed as a health care center that should provide for delivery of the full spectrum of services, including mental health services, that the local population requires.[10] The general hospital that accepts this responsibility is faced with the prospect of pressure to provide ever more services: more services for patients in older age groups, more preventive and rehabilitative services, and more services for mentally ill patients. Hospitals must develop a means of evaluating their programs and prioritizing the use of their resources in an environment of real cost control. The advent and proliferation of state, as well as the national, reimbursement systems based on diagnosis related groups (DRGs) will require a change away from the widespread practice of "cost shifting" to other more lucrative services in order to provide some mental health services. The burden of administration on mental health managers will increase with these changes.

MENTAL HEALTH OUTPATIENT SERVICES

The annual survey of hospitals conducted by the American Hospital Association in 1982 showed that 1,227, or almost 20 percent of United States community hospitals, reported having psychiatric outpatient services.[11] Redlich and Kellert reported an increase in outpatient treatment for mental illness of about 1000 percent over the 25 year period of 1950 to 1975 in South Central Connecticut.[12] In 1975 there were five times as many new admissions to outpatient

as to inpatient services in this area. Redlich and Kellert reported that, nationally, outpatient services in 1950 constituted twenty percent of all patient care episodes, while by 1975 this figure had increased to sixty-five percent.

Outpatient services have been and still are becoming increasingly more important in both the prevention and treatment of mental illness.[13,14] Patients most commonly served by outpatient programs include those recovering from a stage of illness that required hospitalization, those who need help in a crisis, those for whom a prolonged illness may be averted by appropriate psychological assistance on an outpatient basis, and those referred for diagnosis and evaluation.[15] Some outpatient programs focus on serving special groups, such as children, adolescents, the aged, alcoholics, and drug problem patients.

Admission policies to outpatient clinics vary, depending on the needs of the community and on the availability of other resources within the community. Many mental health professionals advocate an open-door or walk-in policy, on the grounds that anyone seeking psychiatric help should have immediate access to it without having to be referred. Some psychiatric outpatient departments, however, still operate on a referral basis only. Some combine the two approaches. The current trend is toward the open-door policy.[16]

A psychiatrist almost universally serves as the director of the mental health outpatient service and is responsible for the total program. This responsibility includes direction of staff members working as an interdisciplinary team

and coordination of their skills to meet the needs of patients. It also includes, however, responsibility for maintaining, strengthening, and developing the organization. In this dual role of clinician-executive, he must be able to integrate his administrative and clinical functions.[17] This has been one of the major difficulties of the profession.

In addition to the director of the service, the professional staff of most clinics includes other psychiatrists, psychologists, and social workers. The staff may also be supplemented by representatives of related disciplines on a full or part-time basis as needed. Disciplines such as internal medicine, pediatrics, neurology, psychiatric nursing, speech therapy, etc., are often represented. The professional staff not only provides diagnostic, consultative, and treatment services, but it should provide training for professional psychiatric personnel, participate in community health activities, and carry on public education programs.[18]

EVALUATION

Evaluation of the effectiveness of mental health services is essential if the health care system is to reach its potential. "Program evaluation" is a general term for the process of making judgments about program effort, effectiveness, efficiency, and adequacy based on systematic data collection and analysis. Much of the literature on program evaluation refers to activities such as policy analysis, evaluation research, program audits, and citizen review and consumer

advocacy.[19,20] In this case, however, the focus is on the internal evaluation of administrative management of a mental health organization.

Hargreaves and Attkisson have defined four general levels of program evaluation activity that seem to represent common developmental stages in the growth of both management capability and evaluation capacity in mental health organizations.[21] At the first level, which they call system resource management, the focus is on the basic internal operations of the organization. The perspective broadens as management and evaluation capacity develops. The next stage is to gain a clear picture of patient utilization of the services provided. The outcomes of intervention with patients are then studied. Finally, the impact on the community as a whole must be appraised. Figure 1 shows the typical management tasks and evaluation activities at each of the four levels. The evaluation activities in this case are limited to levels one and two since the evaluation function and data collection methods were not well-developed at the mental health outpatient service studied. As the evaluation function develops, it will be possible to progressively address all four levels in the future. This should become one of the clinic's goals.

The functions of evaluation at the systems resource management level of evaluation as defined by Hargreaves and Attkisson include several activities that are critical to effective program planning and management.[22] These include: 1) assisting the organization in meeting minimum standards for mental health settings, 2) assisting in the formulation

FIGURE 1

Typical Management Tasks and Evaluation Activities at Four Levels of Evaluation Activity

Level of Evaluation Activity	Typical Management Tasks	Typical Evaluation Activities
I. Systems resource management	Clarify organization objectives	Formulate objectives and indicators of attainment
	Establish lines of responsibility	Clarify roles of evaluator
	Allocate budget and staff effort	Monitor deployment of staff effort
	Establish or modify services	Develop integrated data collection and analysis
	Meet reporting and program standards	Assemble data to meet reporting requirements
	Establish fees and billing procedures	Determine unit costs of services
II. Patient	Make workload projections	Monitor number of patients, units of service, caseloads
	Assure adequate treatment planning	Install problem-oriented record, review patient needs
	Assure continuity of care	Analyze patient flow, referral rates, continuity of care
	Establish quality assurance program	Support utilization review and patient care audits
	Maintain efficiency of service delivery	Analyze cost per episode for specific groups or settings
	Assure equity of service accessibility	Compare patient demographics to census data to identify underserved groups
	Assure appropriate patient screening and treatment assignment	Study premature dropout and under-utilization of care
III. Outcome of interventions	Detect and correct grossly ineffective service activities	Compare patient change from beginning to end of service with expected change
	Select the most cost-effective approach to serving a specific patient group	Compare costs and outcomes of different existing service approaches to the same type of patient
	Establish the improved effectiveness of a proposed new type of service	Carry out a treatment experiment comparing the new type of service to the standard type of service
	Assure that services are acceptable to patients and referral sources	Study the satisfaction of patients and referral sources
IV. Community impact	Participate in regional health planning	Contribute to regional needs assessment activities
	Develop joint interagency services and administrative support systems	Establish evaluation liaison with other programs, funding agencies, and community advisory groups
	Collaborate in integration of services for multiproblem patients	Identify patients and patient groups using or needing services in other programs
	Provide useful primary prevention and indirect services	Evaluate consultation and education services

or revision of program objectives based on mandated services and documented needs, 3) identifying the information that will be needed for continuing review, and 4) identifying and monitoring the allocation of the direct resources of the program, primarily staff time and effort.

In order to effectively evaluate at this level, one must first understand the organization's commitments and agreements regarding its core operations. The evaluator, whether from inside or outside the organization, should be familiar with such documents as the budget, fiscal management procedures, state and local reimbursement requirements, third-party billing regulations, job descriptions or employment contracts, hospital accreditation requirements, grant requirements, and other contractual records. This understanding is needed to identify deficiencies that threaten smooth operation and effective performance in relation to external requirements placed on the program. Analysis of these external commitments also provides a framework for further developing the goals of the management and staff and for improving the scope of services provided. In short, it will help formulate organizational objectives.

Another function at the first level of evaluation aids the manager or evaluator in monitoring the allocation of organizational resources. Financial records accomplish only part of this function. In the typical health organization, including mental health outpatient services, the bulk of the flexible or discretionary resources, or those most easily reallocated and controlled by the manager, consists of staff.

Routine information about staff effort is needed if one is to manage effectively. This is especially true in managing people who are expected to carry out a large variety of functions in which the workload is not directly determined by external demand.[23] A system that documents staff activities must be monitored by the manager since one of his primary functions is allocating the effort of existing staff.

When basic system resource management issues are under control, attention can be devoted to understanding patterns of patient utilization. Evaluation activities at this level monitor patient characteristics at entry, referral patterns, units of service rendered, lengths of service episode, and degree of service capacity being used. These data can then be used to analyze the factors that influence service delivery patterns, patient demand, and reimbursement.[24] The need for such information is often first recognized because it is required to be submitted to funding agencies. This represents an aggravation for the manager since the information demanded by different funders or government agencies is often poorly coordinated and frequently changes from year to year. Rather than a bother, however, managers who accomplish capable patient utilization monitoring quickly come to see how important it is both for internal management and for program advocacy activities such as writing funding proposals and grant requests. Managers who have not instituted systems to accomplish this often find that the externally required activities simply expand to consume all of the resources available for program evaluation or management analysis, leaving management

without the other information it needs for internal decision-making.[25]

Needs assessment can first be addressed after this level of evaluation is completed. Needs assessment is the identification of populations of potential patients who should be served.[26] It is too often simplistically and erroneously accomplished by observing the distribution of the types of patients who are already being served. The focus of modern needs assessment in mental health services is on circumstances in which service patterns are inconsistent with program objectives.[27] Needs assessment, therefore, should involve comparing patient utilization data to other information, such as census data, in order to draw conclusions about understanding different groups. Ethnic minorities and the poor are often discovered to be underserved or served inappropriately. Managers must be prepared to address such issues in their own programs.

Level three evaluation, evaluation of patient outcomes, was not attempted in this case for several reasons. First of all, there is a lack of established, proven outcome evaluation approaches for mental health programs.[28] Those outcome studies that have been proposed are usually not possible to carry out adequately within the budget of a treatment organization unless it has a specific research budget or is affiliated with a university.[29] Also, the utility of outcome evaluation efforts does not match the practical management utility of evaluation and analysis activities at the systems resource management and patient utilization levels. These

elements must be controlled first or outcome evaluation conclusions will not be able to be put to use in changing and improving the program. A clinical case review process that monitors individual patient progress in relation to a treatment plan is mandatory from the outset however.[30]

The lack of good outcome evaluation approaches leaves the average mental health administrator with the dilemma of managing programs where effects are largely invisible and therefore cannot be directly optimized in relation to costs. Additional research is needed for establishing better indexes of effectiveness and for measuring the success or failure of different types of services and delivery systems.[31] These must be made practical and affordable enough to be implemented and used by the average mental health program.

Program evaluation at the community impact level, level four, is even less technically developed than the measurement of individual patient outcomes.[32] Work at this level is started when evaluative work at the patient utilization level has identified a poorly served group of patients. Analysis at this level is a shift away from an internal program focus to giving attention to the larger human service system. Thus in order to do a complete evaluation, the total mental health service system of a community must be considered, not just individual components. This type of analysis is far beyond the capacity of the clinic studied and the scope of this case study.

A critical limit on program evaluation capability is the capacity of a mental health organization to capture and

analyze relevant program data economically, promptly, and flexibly.[33] In the typical mental health program, several record and data sources are created that function relatively autonomously. Examples of these are patient care records, financial records, billing systems, statistical monitoring systems, personnel records, logs, rosters of open cases, and other formal and informal records. Often these are entirely uncoordinated "natural" data systems. Each serves the immediate operational purpose for which it was created but is inaccessible and largely inflexible for any other use. Even within a single record system, there may be no regular procedure for getting an overview or summarization of data and trends. Most mental health programs need to develop some type of integrated information system that includes and gradually supplants these redundant or independent data sources and allows the data to be used for multiple purposes.[34]

FINANCES

The funding limitations of most mental health organizations make fiscal efficiency a very important element of organizational effectiveness and long term survival. Since mental health administrators tend to have extensive professional training but little administrative background, financial management and budgeting are areas that have received too little emphasis in mental health administration. Inappropriate or incomplete use of the budget is relatively common in mental health agencies and may often result in organizational

mismanagement.[35]

Berman and Weeks describe a budget as a comprehensive financial plan, based on anticipated outputs and predetermined hospital goals and policies for future operations which is expressed in dollars of revenue.[36] The budget process whould be aimed at guiding the organization to providing the quantity, type, and quality of services to meet the mental health needs of the community at the least possible expense. Babigian points out, however, that all of the blame for fiscal and budget problems should not be placed on inept administration. Mental health financial administration may present a challenge even for professional financial personnel due to several complications in funding and accounting practices.[37] These include an array of different reimbursement mechanisms, cost estimating and cost allocating rather than direct costing, unusable hospital financial reports, and the practice of hidden cost-shifting.

One of the goals of this project was simply to identify program costs and revenues and relate them to units of service. This is simply stated but not so simply done. Ideally, one should determine the cost of the input relative to the units of benefit to the patient. It has been stated that no definitive, practical way has been found to determine, in quantitative terms, the value of specific services to specific patients or value to the community as a whole.[38] An intermediate objective, then, would be to determine the cost of the input relative to the product or units of output. Even this involves considerable difficulty since the output units

are not homogeneous. On the most basic level one must be able to develop some "equivalent unit" of measure to assess the amount of work performed by each professional. This is a difficult task that has not been practically solved in the mental health field. The basic procedure is to record hours and minutes or multiples of a standard unit of time and weight this by a measure of the sophistication of the provider.[39] Such measures are not entirely satisfactory because they do not measure the skill level required for the task but assume that the patient is served by the proper professional, i.e., psychiatrist, psychologist, social worker, etc. Other means of measuring the services rendered are necessary and should be developed.

Failing the above two methodologies then, the last recourse is to relate costs to total aggregate units of output, output as measured by patient encounters or "visits." This was the method used in the analysis that follows due to both the theoretical limitations as discussed above and the practical limitations on the resources needed to attempt more rigorous measurement of output. Care must be exercised when using an aggregate measure, however, because the results of this type of analysis method will not provide conclusive evidence of inefficiency or cost ineffectiveness. It will, however, be a first step in identifying potential problems and areas for further investigation. Further, comparisons with other general hospital-based mental health services were possible only by using this output measurement.

PURPOSE OF THE PROJECT

The investigator for this project reported directly to the hospital's Vice-President for Patient Services who was a member of the Administrative Council. The hospital organization chart is shown in the attachments. The main purpose of this study was to accomplish an administrative analysis of the Mental Health Outpatient Service (MHOPS) with an emphasis on certain elements and problems.

One of the major problems experienced by the administration at the hospital was that the financial system did not allow identification of the total costs of the service's operations, nor did it identify net revenues.[40] The cost center reports that were available only dealt with direct costs and gross charges. The task then, was to identify total program costs and realized net revenue which were unknown quantities. Deductions from revenue for allowances and uncollectibles were not identified. The administration did not have any picture of the profit-loss condition of this service. An income statement for the MHOPS was requested to be constructed to show these relationships. Once total costs and net revenues were identified, this data would be related to the units of service provided in order to identify unit costs and unit revenues.

Related to this problem was the question of whether or not the Connecticut Department of Mental Health was "getting its monies worth" for the substantial grant the MHOPS received. Since the grant was not tied to or identifiable with specific

patients, the answer to this question was not readily apparent. The impact of the DMH grant on the total income picture was also questioned.

Additionally, other questions were proposed by the administration for investigation in this project as well. The service area of the MHOPS was largely undefined and the characteristics of the patient population served had not been analyzed. It was not known if the service was treating the proper patients as required by the DMH grant. The adequacy of patient access to the system was uncertain, as was the adequacy of patient fee systems.

The productivity of the clinic was unclear as no analysis had been accomplished or comparisons of any kind made with similar services at other institutions. The productivity of each type of provider used by the service had not been examined.

The implications of all of these elements on future planning was unclear, but the administration intended to use the results as an aid in formulating new goals and objectives. This study would also provide the basic framework for needs assessment in the community. It was intended that portions of it would be replicated in the future to measure progress and improvement. In other words, it was to provide a basis and methodology for future evaluation.

It was also requested that a brief description of the State mental health system be included. This description was needed to help executive management at the hospital understand the political functioning of the system and the

motivations of the various elements.

LIMITATIONS

The investigator was allowed full and free access to all pertinent data bases and sources within the hospital, the Department of Psychiatry, and the clinic itself. Certain important limitations did exist however. Since the clinic staff was fully employed and felt themselves to be already carrying a substantial administrative paperwork load, no new data collection efforts were to be started. The mandate for this study was to use data already collected and combine it in new, imaginative ways so as to avoid additional drain on the time available for treating patients. Part of the purpose of the study was to identify these existing sources of useful data and determine what could be accomplished with them.

At the time of this study the hospital Data Processing Department was in the process of installing a new patient accounts software package on its main computer. Since it faced an implementation deadline and was heavily involved with coordinating the changeover and de-bugging the new system, this department was forced to refuse all requests for special programming. Thus only routinely produced patient billing and financial documents were available from Data Processing. Many requests for detailed data were honored by various offices, however, but the data were produced manually.

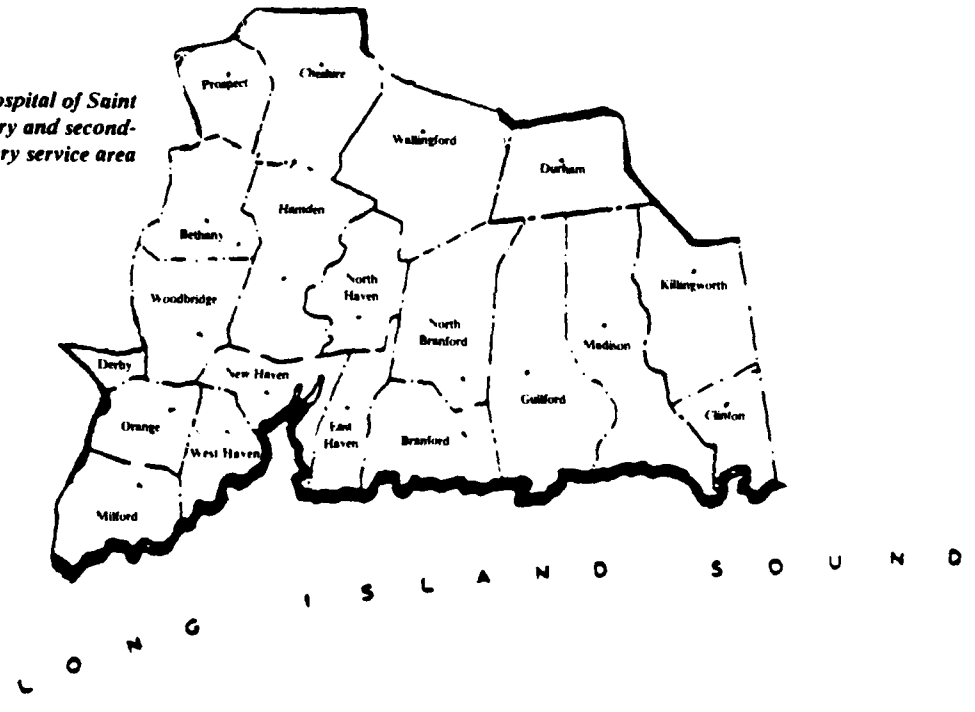
No attempt was made during this study to measure or evaluate the clinical effectiveness of the program. Although this is a very important element in determining the overall effectiveness of any program, both manpower and time constraints prevented an adequate investigation of the impact of intervention with patients. No patient clinical case records were examined or used for this study.

PART II

THE HOSPITAL OF SAINT RAPHAEL

The Hospital of Saint Raphael is a not-for-profit, tax exempt corporation administered by the Sisters of Charity of St. Elizabeth, Convent, New Jersey. It is the fifth largest hospital in the state and operates 475 adult beds. It is the primary community hospital for the City of New Haven, five communities bordering the city, and many suburban communities. Figure 2 shows its primary and secondary service areas.

FIGURE 2



The Hospital of Saint Raphael's primary and secondary service area

Saint Raphael's offers a wide range of acute care and ambulatory care services not typically associated with a community hospital, making it both an outstanding community health resource and a referral center for South Central Connecticut and beyond.[41] It is a major teaching hospital offering post-graduate medical education in all major specialties.

Besides the Mental Health Outpatient Service, the hospital operates several other inpatient psychiatric programs. The psychiatric unit, called Private 1, is a twenty-three bed inpatient unit. A special Children's Psychiatric Emergency Service (CPES) consists of four beds for children up to age eleven. The hospital also operates an Adolescent Unit consisting of two of the twenty-three beds that make up Private 1.

CONNECTICUT MENTAL HEALTH ORGANIZATION

Connecticut's mental health system is extensively layered. This layering tends to make it complex and often confusing. The lowest levels in the state's system are the Catchment Areas. A Catchment Area is a cluster of cities and towns viewed as a single, geographical unit to receive a service. All of Connecticut's 169 cities and towns are divided up into 23 Catchment Areas, based on population.

Each Catchment Area has its own Catchment Area Council, CAC for short. The CAC represents the mental health needs of people living in the communities comprising the Catchment

Area. CAC's are made up of lay citizens (consumers) and mental health professionals (providers). Some CAC members are appointed by their own officials, and others are elected by the town appointees. The final composition of each CAC must be 51-60 percent consumer.

The primary function of a CAC is to study and evaluate the delivery of mental health services to determine how well existing services work and what types of new or expanded ones are needed (Appendix 1).[42]

Just as towns comprise Catchment Areas, Catchment Areas comprise Regions. Connecticut has five Regions, each made up of several Catchment Areas (Appendix 2). Each Region is a separate unit and should offer a full range of services to its patients.

Each Region has its own Regional Mental Health Board (RMHB). The RMHB is comprised of CAC members, with each CAC in the region electing four members to serve on the Regional Board. The Regional Board also has a representative from the principal state health facilities serving the region.

The RMHB's are private, non-profit, incorporated organizations. Each employs its own Executive Director. The Executive Directors are not state employees but private employees of independent organizations. Each Region also has a Regional Director who is paid by the State as an employee of the Department of Mental Health (DMH). The Regional Director is responsible for all DMH facilities, programs, services, grants, and planning and evaluation functions within the Region. Thus the Regional Director is a central, powerful

figure in the operation of mental health programs in each region. Each Regional Board and Regional Director works closely together to coordinate the services needed by residents of the Region (Appendix 3). They review budgets and grant applications, assess service gaps, and plan for necessary services (Appendix 1).[43]

The State Board of Mental Health constitutes the third and highest level of organization. The Board of Mental Health works jointly with the Department of Mental Health to establish policy and determine direction for the agency's service provision throughout the state. The Commissioner of Mental Health, appointed by the Governor, is the principal policy maker at the state level (Appendix 4).

The Board of Mental Health, informally called the State Board, is made up of 20 members, ten appointed by the Governor and ten who serve ex-officio. Of the Governor's appointees, three must be licensed physicians with experience in psychiatry and two must be licensed psychologists. Of the ten ex-officio members, five are the Chairpersons of the five Regional Mental Health Boards. The remaining five are designated by the Regional Boards, one per Board, to serve at the state level.

There is considerable overlap in Connecticut's mental health system. Fifty percent of the State Board is comprised of regional membership, and all of the five Regional Board's members are from CACs and facilities within the Regions. Therefore, if someone is from CAC 23, he might also be someone elected to serve on his Regional Mental Health Board.

He might be the Regional Board Chairperson, in which case he is automatically a member of the State Board of Mental Health as well. This system has been specifically designed to encourage these multiple roles and to maximize interaction between the three levels. It is felt that as the experience, knowledge, and expertise of the participants in the mental health system increase, this arrangement allows their contributions to effectively planned and delivered services to grow also.[44]

CLINIC SERVICE AREA

The Hospital of St. Raphael (HSR) is located in Catchment Area 7 which is within Region II. The Hospital's self-defined service area, both primary and secondary, includes a major portion of Mental Health Regions II and smaller parts of Regions III and V. A special analysis of clinic admission data from the Multi State Information System (MSIS) was accomplished to determine the service area, or the hospital market index, of the Mental Health Outpatient Service. Table 1 shows the town of residence at the time of admission to the MHOPS for patients admitted during a nine month period running from October 1, 1982 to June 30, 1983. These data show that the city of New Haven provided the largest percentage of admissions (46.5%), followed by West Haven (11.6%), Hamden (7.4%), and East Haven (6.5%). These four towns contributed a total of 72 percent of all clinic admissions. The remaining sixteen towns each contributed only a minor percentage of the total

TABLE I

HSR MHOPS - Patient Town of Residence at Admission
October 1, 1982 to June 30, 1983

CAC No.	Town	No. of Admissions	% of Total By Town	% of Total By CAC
HSR SERVICE AREA:				
7	New Haven	100	46.5	
7	Hamden	16	7.4	56.8
7	Woodbridge	2	1.0	
7	Bethany	4	1.9	
6	West Haven	25	11.6	
6	Milford	12	5.5	18.1
6	Orange	2	1.0	
8	East Haven	14	6.5	
8	North Haven	10	4.6	
8	North Branford	3	1.4	16.3
8	Branford	5	2.3	
8	Guilford	2	1.0	
8	Madison	1	0.5	
NON HSR SERVICE AREA:				
5	Derby	1	0.5	
5	Oxford	1	0.5	
5	Seymore	1	0.5	3.0
5	Shelton	1	0.5	
20	Waterbury	1	0.5	
3	Fairfield	1	0.5	
Residence Unknown		8	3.5	3.5
	Totals	215	100%	100%

admissions. The majority of admissions (56.8%) came from CAC 7, mainly because New Haven is in this CAC. There were no admissions from CAC 10, although Clinton, Killingworth, and Durham are considered a part of the HSR secondary service area. Likewise, there were no significant admissions from CAC 20, although Cheshire and Prospect are also in the HSR service area.

From this data it is evident that the HSR MHOPS primarily serves New Haven. Secondarily, it serves the adjacent towns of West Haven, Hamden, and East Haven. A detailed community service index could not be constructed because matching admission and visit data from the HSR MHOPS service area towns could not be obtained to correspond with that available from the clinic. It was possible to determine, however, that during a twelve month period ending June 30, 1981, the HSR MHOPS captured only 3.3 percent of the total outpatient psychiatric clinic admissions for its primary and secondary service areas. This is shown in Figure 3 below. This proportion has probably not changed significantly for subsequent years.

FIGURE 3

PERCENT ADMISSIONS TO HSR MHOPS FROM SERVICE AREA

(Year ending June 1981)

Total outpatient psychiatric clinic admissions in the 19 town HSR service area:	6486
HSR MHOPS total admissions:	212
HSR MHOPS percentage of admissions in HSR service area:	3.3%

There are many other outpatient psychiatric services located within the HSR MHOPS service area. The Connecticut Mental Health Center is the primary provider in the area and alone accounts for over half of all patients treated. The West Haven Veterans Administration Hospital and Yale-New Haven Hospital also have large programs. Additionally, there are six non-hospital based licensed psychiatric outpatient clinics in the HSR MHOPS primary service area.

CLINIC OPERATIONS

Organizational Structure

Currently, the Director of the Mental Health Outpatient Service reports to the Chairperson, Department of Psychiatry, who in turn reports to the Vice-President for Patient Services. The hospital and the Mental Health Outpatient Service organization charts are shown in Appendix 5. The Director is a psychiatrist and the Assistant Director is a psychologist. Both of these positions and the Supervising Social Worker position are less than full time. The rest of the clinic staff consists of social workers, a psychiatric nurse, and administrative personnel. Psychiatric consultation is provided on a part-time basis by HSR staff psychiatrists. There is no administrator in the entire psychiatric chain below the Vice-President level.

Clinic Location

The Mental Health Outpatient Service is located on the corner of Chapel Street and Orchard Street, across from the HSR emergency room entrance. It is on the second floor of an older building owned by the Hospital of St. Raphael Foundation, Inc. The building has been recently renovated and is pleasant in appearance. The current floor plan is functionally adequate and the staff has enough room for private consultations with patients as necessary. Limited rooms are available for students when they are assigned to the clinic. A limiting factor is the steep and narrow stairway which is the only access to the second floor clinic. Many disabled people or wheelchair-bound patients would find these stairs impossible to negotiate. The staff is sensitive to this problem, however, and has expressed flexibility in scheduling needed therapy elsewhere. The separate location also requires additional transit time on the part of the administrative staff, but this is marginally problematic, as the main hospital itself is spread out over a city block. Administrative trips are consolidated to one per day unless they are on an unscheduled, immediate need.

Services Offered

The Mental Health Outpatient Service is an adult, outpatient psychiatric facility functioning within the framework of a general hospital. The general objective of the clinic is to provide basic mental health services to those

in the hospital's community who cannot be seen privately. The goal is to permit patients to become self-sufficient, functioning persons within their families and community. The basic type of service offered is crisis intervention, behavior modification, emergency room back-up, and referral services for other medical departments of the hospital.

The modality and intensity of treatment is dependent on individual patient clinical need. The basic formats consist of individual, group, family, couples, or pharmacological therapy. A thorough initial evaluation is used to determine the diagnosis and to choose the appropriate treatment modality. One or more may be deemed necessary for each patient.

Operating Hours

Normal clinic operating hours are from 8:30 a.m. to 5:00 p.m., Monday through Friday. Special sessions for patients are scheduled as necessary. For example, agoraphobia groups may meet during the evening to experience a particular locale in a public place.

Accessibility

When new patients call the clinic, initial information is taken by the secretary and is relayed to a practitioner. The practitioner then calls the patient back, in effect, to perform an initial evaluation of the patient's problem situation. This call is made the same day or the next morning. An initial intake appointment is made at this time by the

practitioner with the patient. Usually this appointment is made a few days to a week from the time of initial call, depending upon the need of the patient.

The HSR Emergency Room provides a 24-hour emergency psychiatric services and crisis intervention after 5:00 p.m. and on weekends and holidays. After stabilization, patients are referred to the MHOPS if hospitalization is not required.

Accessibility is thus good. On the basis of need, patients are initially seen as rapidly as required. Follow-up appointments are also made in a timely manner.

Referral System

Patients are referred to the MHOPS from many sources. In order of importance, these include the HSR emergency room and other HSR clinics, self-referring patients, the patient's family or friends, the HSR inpatient psychiatric unit (Private 1), and private psychiatrists and physicians. Relatively few patients are referred from DMH facilities or public and voluntary welfare agencies. Significant differences in referral source exist with respect to ethnic group, as will be discussed later.

In view of the persistent overcrowding at the Department of Mental Health's Connecticut Valley Hospital (CVH) in Middletown and the policy of deinstitutionalization, it is remarkable that so few patients are referred to the HSR MHOPS from CVH. This is explained by the fact that CVH has referred patients in the past but failed to supply even such basic

referral documentation as the psychiatric diagnosis or treatment history and plans. The HSR MHOPS felt this was medically unacceptable and insisted on at least a minimum of referral documentation. As a result, CVH has presumably referred patients from this area to the Connecticut Mental Health Center.

PATIENT SOCIODEMOGRAPHIC PROFILE

The HSR Mental Health Outpatient Service participates in the Multi-State Information System (MSIS) for psychiatric patients. The MHOPS utilizes the Local Services System which provides single-unit facilities with a basic computer-assisted, record-keeping system that can be useful in reporting to licensing, sponsoring, and funding agencies. The system can generate individual patient histories and periodic statistical reports. It also has the capability of producing special statistical reports at the request of the using facility. The Admission/Termination application is used by the MHOPS and it uses two input documents. The MS-5 Admission Form (Appendix 6) is a data-collection instrument which is completed for a patient when he begins treatment. It is completed by a professional staff member after the intake interview is completed. It documents basic data about the patient's background and his presenting problems. A Termination Form, the MS-5A, is completed when the patient has completed treatment at the clinic or is referred to another facility or clinic.

The MSIS output products provided the information on patient sociodemographics presented in this report. Although

the clinic routinely completed and submitted the data collection forms, no summarization or analysis had been accomplished. In addition to the standard reports, several special products were requested through the DMH Information Services Division at Middletown, Connecticut. The data represents a twelve month period ending March 31, 1983, the latest period for which data was available. None of this data was identifiable with an individual patient.

The MSIS data shows just over half of the MHOPS patients are between the ages of 18 to 34 years. Sixty-four percent of the patients are female (Table 2). These statistics correspond to the epidemiology of mental illness as reported by Cutler and Kramer.[45] The coming of age of the children born after World War II is now having a marked impact on the psychiatric service system of the country as a whole. This cohort represents nearly one-third of the nation's population and represents a new generation of persistently dysfunctional young adults that requires new programs of community care. The younger adult chronic patient has been shown to exceed the older chronic patient in five of seven areas, including psychiatric symptoms, daily living skills, behavior problems, social isolation, and alcohol and drug abuse.[46] This group is highly mobile and its members use psychiatric services in a "revolving-door" manner; that is, they use multiple facilities. These trends are supported by other statistics shown below as well.

TABLE 2

PATIENT AGE BY SEX

	Male	Female	Total	%
← 17	4	6	10	4%
18-34	48	91	139	51%
35-49	23	43	66	24%
50-64	12	21	33	12%
64	4	7	11	4%
Unknown	7	7	14	5%
TOTAL	98	175	273	
%	36%	64%		100%

By ethnic group, 84 percent of the patients are white and 15 percent were black. The very small number of other minorities was mainly Puerto Rican (Table 3). Almost 70 percent of the patients had completed high school and 31 percent had one or more years of college (Table 4). Just over half the patients were Catholic, while 20 percent were Protestant (Table 5). Forty percent of the clinic's patients had never married. Almost 25 percent were divorced or separated at the time of first contact with the clinic. Only 31 percent were married or remarried at the time of intake (Table 6). Eighteen percent of the patients live alone. Thirty-four percent live with their children, but only 30 percent live with their spouse.

Twenty-two percent live with parents (Table 7). The income characteristics of the patient population cannot be accurately determined from the MSIS data. Although this capability exists, clinic personnel have not used it. There is evidently a reluctance on the part of the staff to ask detailed questions about the financial status of their patients, as this data was either missing or unknown for 84 percent of them. This reluctance was not isolated to the HSR clinic staff but was evident from data from all psychiatric clinics around the state as well. Income data was available for a smaller sample of patients, however, and will be discussed later under DMH Targeted Populations. Suffice it to say here that a majority of the patients are of lower income.

TABLE 3

PATIENT ETHNIC GROUP

	Number	%
White	229	84%
Negro	40	15%
Other	4	1%
TOTAL	273	100%

TABLE 4

PATIENT EDUCATIONAL LEVEL

	Number	%
0 Years	1	0%
1-8 Years	16	6%
9-11 Years	60	22%
12 Years	81	30%
Vocational/Business	22	8%
1-3 Years College	47	17%
4 Years College	24	9%
Graduate School	13	5%
Unknown	9	3%
TOTAL	273	100%

TABLE 5

PATIENT RELIGIOUS PREFERENCES

	Number	Percentage
Protestant	54	20%
Catholic	146	53%
Jewish	11	4%
None	19	7%
Other	25	9%
Unknown	18	7%
TOTAL	273	100%

TABLE 6

PATIENT MARITAL STATUS

	Number	Percentage
Never married	109	40%
Married/Remarried	84	31%
Divorced/Separated	68	28%
Widowed	10	4%
Other	2	1%
TOTAL	273	100%

TABLE 7

PATIENT HOUSEHOLD COMPOSITION

(More than one may apply)

	Number	Percentage
Lives:		
Alone	50	18%
With spouse	83	30%
With children	93	34%
With siblings	32	12%
With parents	60	22%
With other relatives	13	5%
With others	38	14%
In institution	2	1%
Unknown	4	1%

Approximately 93 percent of the patients admitted to the clinic for treatment during this period were admitted here for the first time. Thus only seven percent were re-admissions or had been admitted by the clinic at some time in the past. The source of patient referrals varied considerably. Almost 20 percent of the clinic's patients were self-referred. Approximately 30 percent were referred from the HSR Emergency Room or the Primary Care or other clinics. About 7 percent were referred from the HSR inpatient psychiatric service. Analyzed by ethnic group, it is apparent that black patients self-refer to a lesser extent than white patients, 11 percent versus 20 percent respectively. Sixteen percent of the black patients are referred from the HSR psychiatric inpatient unit versus only five percent of white patients. Almost half of the black patients are referred from the ER or other clinics (Table 8). These statistics may indicate that minorities experience a more difficult time accessing the mental health system than do whites. Further study of this situation is needed.

Many of the patients admitted to the clinic had a history of past psychiatric treatment. Sixty percent of the clinic's patients had been hospitalized for psychiatric services in the past. Almost 20 percent had been cared for by a private psychiatrist and 37 percent had been treated at a Mental Health Center or a psychiatric clinic. Only seven percent indicated that they had received no prior psychiatric care. Most of the prior services were relatively recent, as almost 50 percent of the patients received it within the preceding

six months (Table 9).

TABLE 8

SOURCES OF PATIENT REFERRALS

	White		Black/Other		Total	
	#	%	#	%	#	%
Self-referral	46	20%	5	11%	51	19%
Family or friend	21	9%	2	5%	23	9%
Clergy	3	1%	1	2%	4	1%
Mental Health Center	15	7%	1	2%	16	6%
Mental Hospital	4	2%	-	-	4	1%
General Hospital-Psych. Unit	12	5%	7	16%	19	7%
General Hospital - Other	61	27%	20	46%	81	30%
Court	2	1%	1	2%	3	1%
Public Welfare Agency	2	1%	2	5%	4	1%
Voluntary Agency	1	0%	-	-	1	0%
Psychiatric Clinic	5	2%	1	2%	6	2%
Other Psychiatric Facility	7	3%	-	-	7	3%
Private Psychiatrist	13	6%	1	2%	14	5%
Other Private Physician	11	5%	2	5%	13	5%
Other	21	9%	1	2%	22	8%
Unknown	5	2%	-	-	5	2%
TOTAL	229	100%	44	100%	273	100%

TABLE 9

TIME SINCE LAST PSYCHIATRIC SERVICE

	Number	Percentage
Within:		
Same day	22	8%
Seven days	52	19%
Thirty days	35	13%
Six months	22	8%
One year	22	8%
Over one year	48	18%
No prior service	20	7%
Unknown	52	19%
TOTAL	273	100%

PATIENT DIAGNOSES

The initial diagnostic impressions at the time of patient intake indicate a patient population with moderate to severe mental health problems (Table 10). The overall conditions have generally been long-lasting (Table 11). The psychiatric problems have been manifested in many physical and social disturbances. Almost 40 percent of the patients have experienced suicidal thoughts or acts. Seventy-seven percent suffer from depression. More than half suffer from anxieties or phobias. Most of these patients have experienced disturbances both at home and at their work place (Table 12).

TABLE 10

PRINCIPAL ADMISSION DIAGNOSIS - DSM III

	Number	Percentage
Alcohol-related	7	5%
Drug-related	4	3%
Affective disorders	29	22%
Schizophrenic related	12	9%
Anxiety/neuroses	17	13%
Personality disorders	7	5%
Social maladjustment	31	23%
Other, psychotic	2	2%
Other, non-psychotic	3	2%
Pre-adult syndrom	5	4%
No mental disorder	2	2%
Diagnosis deferred	10	8%
Unknown	3	2%
TOTAL	132	100%

TABLE 11

OVERALL SEVERITY BY PROBLEM DURATION

	Week	Month	1 Yr.	2 Yrs.	2 Yrs.	Unknown	Total	%
Slight	-		2	-	1	-	3	1%
Mild	-	1	6	1	8	1	17	6%
Moderate	-	11	53	9	79	4	156	57%
Severe	-	1	22	11	56	5	95	35%
Unknown	-	-	1	-	1	-	2	1%
TOTAL	-	13	84	21	145	10	273	100%
%	-	5%	31%	8%	53%	4%	100%	

TABLE 12

PATIENT PROBLEM APPRAISAL
(More than one may apply)

	Number	Percentage
Physical		
Sleeping	166	61%
Eating	108	40%
Enureses	0	-
Seizures	6	2%
Speech	5	2%
Other physical	63	23%
Social relations		
With children	41	15%
With spouse	89	33%
With family	124	45%
With others	145	53%
Social performance		
School	20	7%
Job	122	45%
Housekeeping	64	23%
Other Symptoms		
Suicidal thoughts	85	31%
Suicidal acts	24	9%
Anxiety, fear	144	53%
Obsessions	30	11%
Depression	210	77%
Somatic concern	44	16%
Social withdrawal	109	40%
Dependency	66	24%
Grandiosity	2	1%
Suspicion	30	11%
Delusions	15	5%
Hallucinations	15	5%
Anger, belligerence	76	28%
Assaultive acts	15	5%
Alcohol abuse	36	13%
Drug abuse	11	4%
Antisocial acts	14	5%
Sexual problems	15	5%
Agitation	39	14%
Disorientation	26	10%
Speech disorder	13	5%
Lack of emotion	40	15%
Inappropriate affect	64	23%
Impaired routine	165	60%

DEPARTMENT OF MENTAL HEALTH TARGET POPULATIONS

The State Department of Mental Health has defined "target populations" for recipients of state grants. These three target populations are the (1) chronically mentally ill, (2) those at risk of hospitalization, and (3) the poor as defined by the DMH. The DMH definition of "poor" is that total family income does not exceed 150% of the federal government poverty level. The definitions of these target populations are detailed in Appendix 7.

An analysis of recent patient admissions showed that 71 percent of the MHOPS patients met the "at risk" criteria, and 51 percent met the DMH criteria of "poor." Only 23 percent of all admissions failed to qualify for inclusion into a DMH target population. Since these categories are not mutually exclusive, many patients satisfied the definition of more than one category. Over half of the patients qualified for more than one of the target populations and almost 20 percent met the criteria for all three categories. It is interesting to note that 75 percent of all the "chronic" patients were also "poor," as were 65 percent of the "at risk" patients.

Since no goals or guidelines have been set forth as minimum requirements for grantees to meet, it is not possible to definitively evaluate this target population percentage. It seems, however, that this data corresponds well with the MSIS data on severity and problem presentation, so that one can conclude that a high proportion of MHOPS do meet state

grant target population criteria.

PRODUCTIVITY

The Mental Health Outpatient Service employs a mix of professional skills. These include psychiatry, sociology, psychiatric nursing, social work, and administrative skills. The Clinic utilizes the services of four psychiatrists for a few hours each for professional services. One half of the clinic staff are part-time employees. Additionally, professional students are trained in the clinic periodically throughout the year.

The MHOPS has experienced a significant increase in patient admissions over the last two years. Total admissions increased approximately 21 percent in the statistical year (SY) ending June 30, 1982 (SY 82) and a further 16 percent in the statistical year 1983 (SY 83) (Table 13). Patient visits have increased also after a slight decline during SY 82. The increase in outpatient visits from SY 82 to SY 83 was most dramatic at 48 percent (Table 14). These increases have occurred despite more modest increases in the reported availability of professional staff hours on duty. Professional staff hours increased 7 percent in SY 82 and only 4 percent in SY 83. Student trainee available hours changed greatly from year to year (Table 15).

TABLE 13

PATIENT ADMISSIONS

Year ending June	New Admissions	Readmissions	Total Admissions	%
81	193	19	212	-
82	228	28	256	+21%
83	268	30	298	+16%

TABLE 14

PATIENT VISITS - STAFF & TRAINEE

Year ending June	Staff	Trainee	Total Visits	% Change
81	4116	513	4629	-
82	4084	55	4139	-11%
83	4873	1236	6109	+48%

TABLE 15

PROFESSIONAL STAFF HOURS ON DUTY

	81	82	% Change	83	% Change
Psychiatrists	1165	1312	+13%	1327	+ 1%
Psychologists	1053	1098	+ 4%	1050	+ 4%
Trainees	123	68	-45%	444	+553%
Social Workers	4764	4468	- 6%	4826	+ 8%
Trainees	1221	220	-82%	2156	+880%
Psychiatric Nurse	1017	1696	+67%	1756	+ 4%
Trainee	223	-		-	
TOTALS					
Staff	7999	8574	+ 7%	8959	+ 4%
Trainees	1567	288	-82%	2600	+803%

A combination of these factors shows an increase in professional staff productivity over the past three years as measured in patient visits per one hundred hours worked. As a whole, the HSR MHOPS saw 51 patients for every 100 hours worked in statistical year 81. This dropped to 48 per one hundred hours in SY 82, a decrease of 6 percent. In SY 83, however, productivity increased to 54 patients per one hundred hours, an increase of 12.5 percent. Student workload is not included in the figures discussed here but followed the same trend (Table 16).

TABLE 16

PATIENT VISITS PER 100 HOURS ON DUTY

	81	82	% Change	83	% Change
Psychiatrists	52	58	+12%	66	+14%
Psychologists	37	26	-30%	47	+81%
Trainees	58	30		35	
Social Workers	50	49	- 2%	53	+ 8%
Trainees	29	16		50	
Psych. Nurse	75	51	-32%	53	+ 4%
Trainee	38	-		-	
TOTALS					
Staff	51	48	- 6%	54	+12.5%
Trainees	33	19		48	

An analysis of personnel cost per patient visit shows that visits to the psychiatrists are the most expensive at approximately $44.06 for each visit (Table 17). This is apparent even though the psychiatrists are the most productive with 66 patient visits per one hundred hours, as shown in Table 16. Their high salaries more than offset their higher productivity and make their visits almost twice as expensive as the psychiatric nurse at $22.64. The cost for psychologist and social worker visits have been computed in two ways, with and without trainee visits included in the cost computations. Trainee visits can be considered a part

of the staffs' workload since the staff members supervise the students and are ultimately responsible for the patient's care. Inclusion of trainee visits significantly reduces the costs of psychologist and social worker visits. Thus it is evident that students actually increase clinic productivity rather than demanding so much staff time in supervision that productivity is reduced. The training programs should be continued from a productivity standpoint as well as for professional reasons.

TABLE 17

PERSONNEL COST PER PATIENT VISIT
(Year Ending June 30, 1983)

	Professional Staff Hours	Annual Personnel Cost	Patient Visits	Personnel Cost Per Visit
Psychiatrists	1327	$38,380	871	$44.06
Psychologist	1050	$13,033	493	$26.44
with Trainee			647	$20.14
Social Worker	4826	$50,514	2577	$19.60
with Trainee			3659	$13.81
Psych. Nurse	1756	$21,100	932	$22.64

Due to the higher costs of the services provided by the psychiatrists, clinic management should insure that their level of professional expertise is clinically necessary and that a social worker or psychologist cannot be utilized. The most significant potential cost reductions lie in the avenue of reducing part-time psychiatric man hours and shifting the work, when clinically feasible, to other professionals. The part-time psychiatrists should not be engaged in treating patients that the regular staff have time for and are capable of treating.

Comparisons of various mental health clinics' productivity and cost effectiveness is difficult because of the lack of DMH established standards, the lack of necessary data, and the varying patient care modalities of clinics throughout the Region and State. However, it is possible to compare the HSR MHOPS' productivity in terms of visits per one hundred staff hours to a limited number of general hospital clinics of similar size and to the averages of reporting clinics throughout the state as a whole. Data for this comparison is available for the year ending June 30, 1982 for only 13 of 21 general hospital clinics. Eight hospitals failed to report data. Although this comparison is far from perfect, it is all that is possible with currently available data. Five individual hospitals were selected for direct comparison.

The HSR MHOPS generally falls on the lower end of the productivity comparison for SY 1982 (Table 18). MHOPS' productivity increased to 54 visits per one hundred hours in SY 83, but this is still below the all-hospitals average for

SY 82. When this data is broken down by type of provider, it is evident that the psychiatrists and the psychologists are below all other hospitals for which data is available (Table 19). When the HSR MHOPS data is adjusted for administrative time for the director and his assistant, this basic outcome is unchanged. As indicated in the earlier discussion, this type of aggregate comparison does not give conclusive evidence of differences in productivity. It is an indicator of potential problems, however, and points out the need for finer data collection and analysis.

TABLE 18

PRODUCTIVITY COMPARISON
(Year Ending June 30, 1982)

	Total Professional Hours on Duty	Patient Visits	Total Patient Visits Per 100 Hours
Hospital of St. Raphael New Haven	8862	4084	48
Charlotte Hungerford Torrington	7536	5235	69
St. Francis Hospital Hartford	7658	4002	53
Greenwich Hospital Greenwich	10391	7751	75
Center for Mental Health Manchester	13283	7098	55
St. Mary's Hospital Waterbury	10270	9036	92

Average for all reporting general hospitals: 76

TABLE 19

PRODUCTIVITY COMPARISON
BY PROVIDER AND HOSPITAL
PATIENT VISITS PER 100 HOURS
(Year Ending June 30, 1982)

	All	Psychiatrists	Psychologists	Social Worker	Other
Hospital of St. Raphael New Haven	48	58	26	47	51
Charlotte Hungerford Torrington	69	94	-	78	64
St. Francis Hospital Hartford	53	83	45	47	35
Greenwich Hospital Greenwich	75	87	72	68	41
Center for Mental Health Manchester	55	74	54	52	46
St. Mary's Hospital Waterbury	92	77	109	76	94

FINANCES/PROFITABILITY

Hospital of St. Raphael's financial records indicate that during the first nine months of fiscal year 83, the Mental Health Outpatient Service generated gross revenue of $138,676 from patient services. This is 26.3 percent above budgeted gross revenue due to the increased workload experienced over the prior year. This gross revenue breaks down by Financial Class as follows:

FIGURE 4

GROSS PATIENT REVENUE

Blue Cross	$ 6,696
Medicare	9,371
City Welfare	7,705
State Welfare	22,190
Other/Self-Pay	92,351
Employee	363
Total	$138,676

Blue Cross does not cover outpatient psychiatric care so these charges of necessity are moved to other payment categories. The vast majority is transferred to the self-pay class. After this adjustment, gross revenue is estimated to break down by percentage as shown below:

FIGURE 5

GROSS PATIENT REVENUE WITH BLUE CROSS ADJUSTMENT

Medicare	$ 9,371	6.8%
City Welfare	7,705	5.6%
State Welfare	22,190	16.0%
Other/Self-Pay	99,047	71.4%
Employee	363	0.3%
Total	$138,676	100.0%

The Billing Office codes patient bills to this class even though the bill will not be paid by Blue Cross, and they must be transferred to another financial class at a later time. It may be simpler to assign these accounts to the correct financial class initially.

From the gross revenue amounts shown above, certain adjustments or reductions must be made to compute adjusted gross revenue. These adjustments are contractual adjustments by welfare agencies, low income allowances, and Hill-Burton allowances. Adjusted gross income is shown below.

FIGURE 6

ADJUSTED GROSS PATIENT REVENUE

Medicare (100% of Medicare part)	$ 9,371	10.5%
City Welfare (approx. 60%, $22.75/visit)	4,640	5.2%
State Welfare (approx. 60%, $22.75/visit)	13,362	14.9%
Other/Self-Pay (visit all.= $6,995; Hill-Burton = $30,385)	61,667	69.0%
Employee	363	0.4%
Total Adjusted Gross Patient Revenue	$89,403	100.0%

This gross patient revenue is reduced approximately 35 percent or $49,273 through allowances to welfare agencies

and to low income bill reductions. Further write-offs due to uncollectible accounts have totalled $24,832 in the first nine months of FY 83, so net patient revenue is calculated at $64,571.

FIGURE 7

NET PATIENT REVENUE

Adjusted gross patient revenue	$89,403
Uncollectibles write-off	- 24,832
Net patient revenue	$64,571

FIGURE 8

ESTIMATED ACCOUNTS RECEIVABLE

Net patient revenue	$64,571
Actual cash collections (FY 83)	- 38,428
Estimated accounts receivable	$26,143

The above figure for accounts receivable is an estimate, since receivables data for FY 83 alone is not readily available from the HSR accounting system. The Trial Balance Summary for the MHOPS shows a total accounts receivable as of June 30, 1983 of $153,491 (Appendix 8). This amount is based on gross charges. The Trial Balance Summary shows account aging; however, the "current" portion includes all past amounts due for a patient, no matter how old, if the patient was seen during the last 30 days. Thus it is not possible to analyze true current accounts receivables from the Trial Balance Summary since old amounts due are continually brought forward.

Either method, Trial Balance Summary or estimate based on net patient revenue, however, indicates large amounts in receivables. The Trial Balance Summary shows approximately 300 days in receivables, while a calculation based on net patient revenue shows about 110 days outstanding for FY 83. These figures indicate that clinic personnel need to devote more time in checking their patients' past due accounts and counseling them on timely resolution.

An analysis of the sliding scale fee system was conducted. Four hundred and ten (410) active patient accounts were reviewed to determine the frequency of classification to payment categories A through G (Appendix 9). This review showed that over 85 percent of these accounts classified for Class A, full amount pay accounts. Seven percent were found to be in Class E and two percent in Class G. Classes F and G were recently added, so upon reclassification, most Class E accounts will probably qualify for Class G. Thus it is evident that most patients fall in either the top or bottom classifications (Table 20). These classifications cannot be used as an indication of income level, since all welfare patients or Hill-Burton applicants are put in Class A. It is HSR's policy that only one method of assistance will be applied, either the visit allowance or Hill-Burton reduction (Appendix 10), not both. Welfare patients are put in Class A, since only partial payments are made by these agencies.

TABLE 20

PATIENT FEE CLASSIFICATION ANALYSIS

Class	Number	Percentage
A	352	86.0%
B	2	0.5%
C	5	1.0%
D	1	0.2%
E*	29*	7.0%
F	1	0.2%
G	7	2.0%
Unknown	13	3.0%
TOTAL	410	100%

*Note: Classes F and G were recently added. Most of those currently in Class E will reclassify into Class G.

It is interesting to note that there is considerable overlap in bill reductions between the visit allowance and Hill-Burton systems. For example, an unmarried person in visit allowance Class D would also qualify for Hill-Burton assistance. A patient in Class D would enjoy a 33 percent reduction in fee, but he would also qualify for a 50 percent Hill-Burton reduction. Those patients in Class G easily qualify for 100 percent Hill-Burton bill reduction, whereas Class G allows only a 78 percent bill reduction.

In most cases it is in the best interest of the patient to apply for Hill-Burton assistance. In the interests of simplicity for both the patients and the hospital staff, it is recommended that the Patient Classification Scale and

sliding fee system be terminated and financial assistance be administered solely through the well-organized Hill-Burton program. The impact of this change on net revenue would be minimal since the percentage of uncollectible account write-offs is very high anyway.

The MHOPS Budget Variance Report for the year-to-date ending June 30, 1983 indicates direct expenses of $164,644 (Appendix 11). The clinic physically moved into its current facility in April 1983 under a rental agreement with the Hospital of Saint Raphael Foundation, Inc. The monthly rental amount is $2904 and has been paid for three months. In order to protray a more accurate picture of actual annual costs, the rental expense had been annualized to a nine-month expense of $26,136 since it is now a permanent, fixed expense. A further adjustment of $3,611 is made for building modifications/repairs that were erroneously charged to the clinic. That amount is being transferred from the MHOPS account to the HSR Foundation Inc., the owners of the property. Thus adjusted direct expenses total $178,457.

Indirect expenses are calculated based on the percentage allocated by the Blue Cross cost-finding system. Indirect costs are 59 percent of direct expenses after an adjustment is made for plant operations and plant maintenance expenses in concert with the above annualized rent adjustment. Indirect expenses total $105,290 and total expenses for the first nine months of FY 83 total $283,747. No direct depreciation expenses are included.

The MHOPS is partially funded by a Connecticut Department of Mental Health Community Grant of $89,411 for FY 83. As of June 30, 1983, $67,734 had been received by HSR from the state grant funds. This grant is not patient specific. It operates as a subsidy to encourage the clinic to treat the types of patients deemed appropriate by the DMH and the region, i.e., the target populations. Thus it is not possible to match individual patients with grant funds.

In order to get a concise picture of the MHOPS' financial performance through the first nine months of FY 83, an income statement is presented below summarizing data previously described.

FIGURE 9

INCOME STATEMENT, OCTOBER 82 - JUNE 83

Gross patient revenue		$138,676
Less: Welfare agency allowances	$11,893	
Hill-Burton & Visit Allow.	37,380	
Other write-offs	24,832	
Net patient revenue		64,571
DMH Community Grant		67,734
Revenue From Operations		$132,305
Direct Cost: Labor	$147,098	
All other	31,359	
Total Direct		$178,457
Indirect Costs		$105,290
Total Costs		$283,747
Net Operating Loss	$151,422	

Using the revenue and cost data above with workload data, average unit costs can be computed. The average direct cost per patient visit to the MHOPS is $40.86 per visit. The average total cost, including assigned overhead, is $64.98 per visit. Patient revenue actually realized is approximately $14.79 per visit. Total revenue per visit, including the DMH grant, is $30.30. In other words, the HSR has realized a net loss of $34.68 for each visit to the MHOPS.

In terms of admissions to the clinic, the direct cost per admission is $818.61 (average of 20 visits per admission). The total cost for an average admission during FY 83 is $1301.59. Patient revenue is $296.20 per admission and total revenue is $606.90. Again, the HSR is subsidizing each clinic admission by $211.71 in direct costs and $694.69 in total costs (Table 21).

TABLE 21

UNIT COST AND UNIT REVENUE SUMMARY

	Per Visit	Per Admission
Direct Cost	$40.86	$ 818.61
Total Cost	$64.98	$1301.59
Patient Revenue	$14.79	$ 296.20
Total Revenue	$30.30	$ 606.90

It is evident that total revenue does not cover direct expenses, much less total expenses. In order to just break even with direct costs, the MHOPS would have to increase its workload by 71 percent (156 admissions and 3120 visits), assuming constant costs (no increase in staff) and constant fee collection rates.

The financial loss on operations is not necessarily bad, as there are, no doubt, many areas within the hospital that do not generate revenues adequate to cover their costs. "Cost shifting" had traditionally allowed hospitals to operate necessary but unprofitable operations from the surplus of more profitable services. However, the hospital management should know which services do operate at a loss and what that loss is. Then informed decisions can be made as to the relative value of the service to the community. Since the cost of operating the MHOPS is a very small part of total HSR operating costs, its financial position may be deemed entirely satisfactory, a judgment that must be made by HSR executive management. With the advent and proliferation of prospective reimbursement systems based on diagnosis related groups, however, this type of financing will become more difficult. Programs will increasingly be required to operate from their own revenue streams, at least with respect to direct operating costs.

The DMH Community Grant funds approximately 38 percent of the direct operating expenses of the MHOPS. In this respect it is an important source of operating income for the

clinic. The grant constitutes just over 50 percent of the revenue from operations. It is insufficient, however, to even come close to making up the operating loss of the clinic. Of course, this is not the intention of the DMH grant. The purpose of the DMH grants are to encourage the operation of outpatient services so as to avoid hospitalization of patients in crowded and expensive state inpatient mental hospitals. In the case of the HSR MHOPS, the DMH is contributing only about 24 percent of total costs, so it is getting a "good deal" in that sense. On the other hand, it is contributing $15.51 for each clinic visit or $310.71 for each clinic admission, amounts that are probably considerably higher than for other general hospital clinics that are more productive.

PLANNING

Current short and long range plans for the Mental Health Outpatient Service are neither specific nor adequate for meaningful planning. Goals for future accomplishment have not been adequately identified.

This is in part due to the fact that the Department of Mental Health changes its program emphasis from year to year. The DMH often does this with little lead time and little evident concern for the impact on functioning programs. This forces grant recipients, who want to continue to receive state funds, to alter their programs to conform to new DMH desires. Little specific guidance accompanies the DMH grant

applications, so programs are often unsure whether they are meeting state requirements or not. This does not create a situation conducive to long range planning. In the absence of DMH planning guidelines, the MHOPS should nevertheless identify those segments of the hospital's community that it will serve and plan services and programs to meet their needs. The planning process should include identification of a population and specific services on which to concentrate. The sociodemographic data presented in this report is intended to be used as a basis for a needs assessment study.

Future program changes or initiations should consider the impact on productivity and unit costs so that negative consequences may be avoided. Long-range plans should include specific goals to improve cost effectiveness (unit costs) and to improve productivity (patients treated per clinician). Financial goals should include reducing bad debt losses and accounts receivables. Improved financial performance should be a concern in light of DMH funding shortages. Future grant increases (3.5% for FY 84) will be limited or nonexistent, as no doubt will welfare and Medicare funds also. Thus increased attention to costs will be required so that uncontrolled cost increases do not threaten the existence of the Mental Health Outpatient Service.

RECOMMENDATIONS AND CONCLUSION

Throughout this paper several individual recommendations were expressed. The method through which the most organizational improvement can be realized, however, is in the setting of integrated goals and objectives. Hopefully, the data presented herein will be used as a baseline to measure future improvement. The major recommendations that should be incorporated as goals and objectives in both short and long range plans of the Mental Health Outpatient Service and the Department of Psychiatry follow.

The MHOPS should identify segments of the community population and specific services on which to concentrate. This should be done in spite of the Department of Mental Health and the difficulties it creates with program shifts and changing definitions. There is a sufficiently broad range of mental health resources available in the St. Raphael's service area so that this program can specialize without jeopardizing the overall availability of a wide spectrum of services. The services or groups selected for specialization should complement the services offered in the larger programs at other near-by institutions. This is not to say, however, that eligibility for the state grant should be lost. The grant is an important revenue source and should be continued or even increased if possible. What is being said is that the services on which to concentrate would also serve the DMH target populations.

The statistics describing patient referral patterns indicate that few referrals for admission to treatment are from professional sources. The state operated Connecticut Valley Hospital (CVH) could be a lucrative source if the administrative problem of patient records could be solved. Work should continue in this effort and it should be elevated to a higher level of executive management within the hospital. With contact at a similarly high level at CVH, the problem may be able to be resolved. Since few referrals are received from private physicians or private psychiatrists, an effort should be made to educate area physicians and psychiatrists on the services available at the MHOPS. The hospital community relations department would be most helpful in this effort and should be consulted for guidance in any such "marketing" effort.

The differences evident in referral sources for black versus white patients should be investigated further. This data may indicate that minorities have a hesitancy to self-refer when they experience a problem and that they are not accessing private practice psychiatrists. This, in turn, may indicate the real need for an outreach program directed toward the minority population.

The training programs for psychologists and social workers enhance the program and should be continued. Because they are not on the hospital payroll, students measurably add to the overall cost effectiveness of the clinic. It was evident that the students do not require supervision to the extent

that the productivity of the staff is degraded.

The apparent problem of low productivity should be addressed. Objectives should be established to increase productivity to a level acceptable to both clinic and hospital management. This might entail reviewing the case loads of individual staff members and making adjustments as necessary. Although they are often distasteful to practitioners, individual productivity expectations or guidelines should be established for each staff member.

In combination with the above recommendation, plans to reduce unit costs and increase unit revenues should be formulated. Since psychiatrists are by far the most expensive manpower element in the mix of professional skills employed by the clinic, the most significant potential cost reduction or utilization improvements also exist with them. Management should insure that the part-time psychiatrists are not engaged in treating patients that the other practitioners are professionally capable of treating.

A system to periodically (at least quarterly) review clinic productivity and unit costs should be developed. Improvements in current data collection methods need to be made so that the type of service rendered, the amount of service time, and the clinician who delivered the service can be summarized and analyzed for the clinic as a whole. When this has been accomplished, the calculation of expenditures for each client served will be possible based on hours of service by each staff member and an allocation of indirect

costs. Finally, the program should move to use cost and patient outcome information to discover and solve service delivery problems. The National Institute of Mental Health has developed a workbook designed to help programs implement such a system. It contains sample data collection forms and sample tabulations that would be of great help in this effort. It is cited below:

> National Institute of Mental Health, A Client-Oriented System of Mental Health Service Delivery and Program Management: A Workbook and Guide, DHEW Publication No. (ADM) 76-307, Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402, 1976.

The staff of the MHOPS currently view patient acceptance of responsibility for payment of clinic fees as an integral part of therapy. They routinely monitor large past due patient accounts. Staff efforts in this regard should be redoubled, however, in view of the very large bad debt write-offs experienced in the past. A twenty-five percent reduction in these uncollectible accounts would result in added net patient revenue of approximately $8,300 per year, a thirteen percent increase.

The sliding scale fee system should be terminated and patient financial assistance should be administered solely through the Hill-Burton program. The current dual system is confusing to both patients and staff and could inadvertently penalize some patients who are not made fully aware of or who cannot fully understand the various options. Using the Hill-Burton program exclusively will save both the clinic and billing office staffs' time and effort as they will no longer

be required to determine the appropriate payment category, record this data, and periodically update the patient's status as financial circumstances change.

Executive management should add a full-time administrator of psychiatric clinical services to the Department of Psychiatry staff. This administrator should have specific expertise and experience in psychiatric delivery systems, in federal, state, and local regulations, and in funding. This administrator should be directly responsible to the chairman of the department of psychiatry. His responsibility should be for all components of the hospital's psychiatric system, both inpatient and outpatient, thus insuring coordination and integration. He should meet regularly with the directors of the inpatient and outpatient care services. This one administrator for all components of the psychiatric system will provide a rational and unified approach to management of the program as well as remove some of the purely administrative workload from the directors of the inpatient and outpatient services.

Hopefully these recommendations will help the Hospital of Saint Raphael in its quest for effective administration of the Mental Health Outpatient Service. That the outcome of current initiatives to control health costs through prospective payment systems will eventually impact on this service is a certainty. Because it will be increasingly difficult for the hospital's inpatient operations to provide financial resources for programs such as this, the administration

and management of the Mental Health Outpatient Service must begin to move toward financial self-sustainability.

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LIST OF APPENDICES

Sec. 17-226k. Catchment area council; representatives; duties. (a) [illegible] catchment area council shall consist of one representative [illegible] portion thereof located within the same catchment area, except that [illegible] area consists of (1) only two towns or portions thereof, three representatives [illegible] be appointed from each town or portion thereof or (2) only one town [illegible] thereof, seven representatives shall be appointed. Such representatives [illegible] consumers and shall be appointed by the first selectmen [illegible] official of such town or portion thereof. The representatives [illegible] by majority vote an additional number of representatives [illegible] exceed the number initially appointed. Not less than [illegible] per cent [illegible] more than sixty per cent of the total catchment area [illegible] consumers.

(b) Each catchment area council shall study and [illegible] mental health services in its respective catchment [illegible] regulations adopted by the commissioner of mental [illegible] make such reports and recommendations to the regional [illegible] such boards of regional mental health directors [illegible] catchment area council may deem necessary.

(c) Each catchment area council shall elect [illegible] serve as members of the regional mental health board [illegible] located, not more than two of whom shall be providers of mental [illegible]. The regional mental health boards shall consist of the members [illegible] catchment area councils and one representative designated by the [illegible] of mental health from each state-operated facility serving the region.

(d) Members of catchment area councils shall receive no [illegible] their services but may be reimbursed by the department of mental health [illegible] necessary expenses incurred in the performance of their duties.

(P.A. 75-[illegible] P.A. [illegible] P.A. [illegible] P.A. [illegible] P.A. 82-[illegible])

[illegible] P.A. [illegible] whereas there were [illegible] there were three representatives from each [illegible] P.A. [illegible] replaced provisions [illegible] catchment area councils with new provisions [illegible] regional mental health boards [illegible] one representative from each facility serving the region and [illegible] P.A. 82-[illegible] changed [illegible] directors [illegible] members [illegible] provided that not more than two members could be providers of mental health services.

See Sec. 17-[illegible]

Appendix 1-2

Sec. 17-226l. Regional mental health boards; duties; funds; staff; representation of alcohol and drug programs. (a) Each mental health region established by the commissioner of mental health pursuant to section 17-226e shall be advised by a regional mental health board. Each such board shall carry out its duties in accordance with regulations adopted by the commissioner of mental health and shall study the needs of the region and develop plans for improved and increased mental health services, and shall (1) Together with the regional mental health director, plan, endeavor to stimulate and coordinate additional and expanded mental health services, review all applications for funds, make joint recommendations with respect thereto and transmit such recommendations to the commissioner of mental health and review and make specific recommendations to the commissioner of mental health concerning the annual budget of the region and state subsidies for regional mental health programs; (2) report their findings and conclusions annually to the commissioner of mental health and to the regional mental health director together with recommendations for a comprehensive plan and priority ranking for the establishment or expansion of mental health services within the region; (3) receive and expend federal, state and local funds under the provisions of subsection (a) of section 17-226b, sections 17-226d to 17-226f, inclusive, subsection (b) of section 17-226g and sections 17-226j to 17-226m, inclusive; and (4) cooperate with federal comprehensive health planning agencies or their successors, established pursuant to United States Public Law 93-641, in planning comprehensive mental health services within its region.

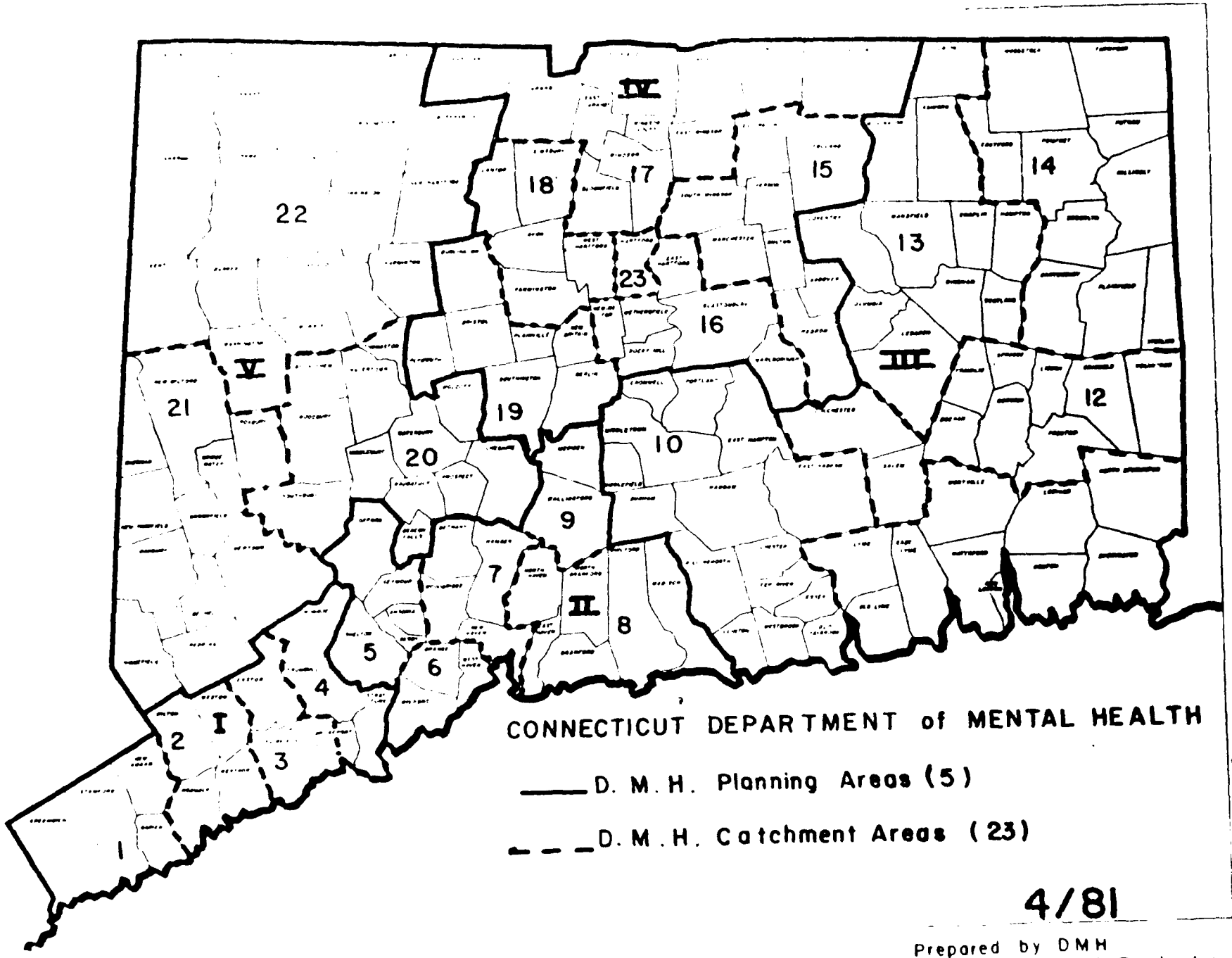
(b) Any regional mental health board which is incorporated, or any combination of adjoining mental health boards which are incorporated, may apply to the commissioner of mental health for funds to carry out the provisions of subsection (a) of section 17-226b, sections 17-226d to 17-226f, inclusive, subsection (b) of section 17-226g and sections 17-226j to 17-226m, inclusive. Said commissioner shall, by regulation, establish minimum standards for eligibility of the regional mental health boards to receive state funds which shall be accounted for annually to said commissioner.

(c) Each regional mental health board shall employ necessary staff which shall [illegible] office of the commissioner of mental health [illegible] combined with funds from local sources. Such staff [illegible] the catchment area councils as [illegible] such board.

(d) Each regional mental health board shall [illegible] a plan to ensure appropriate [illegible] representing alcohol and drug [illegible] of concerned individuals.

(P.A. 75-566, S. 6, 14; P.A. [illegible] S. 59, 82; P.A. 77-544, S. 12, 16; P.A. [illegible])

See Secs. 17-155l, 17-226e, 17-22[illegible]



CONNECTICUT DEPARTMENT of MENTAL HEALTH

——— D. M. H. Planning Areas (5)

– – – D. M. H. Catchment Areas (23)

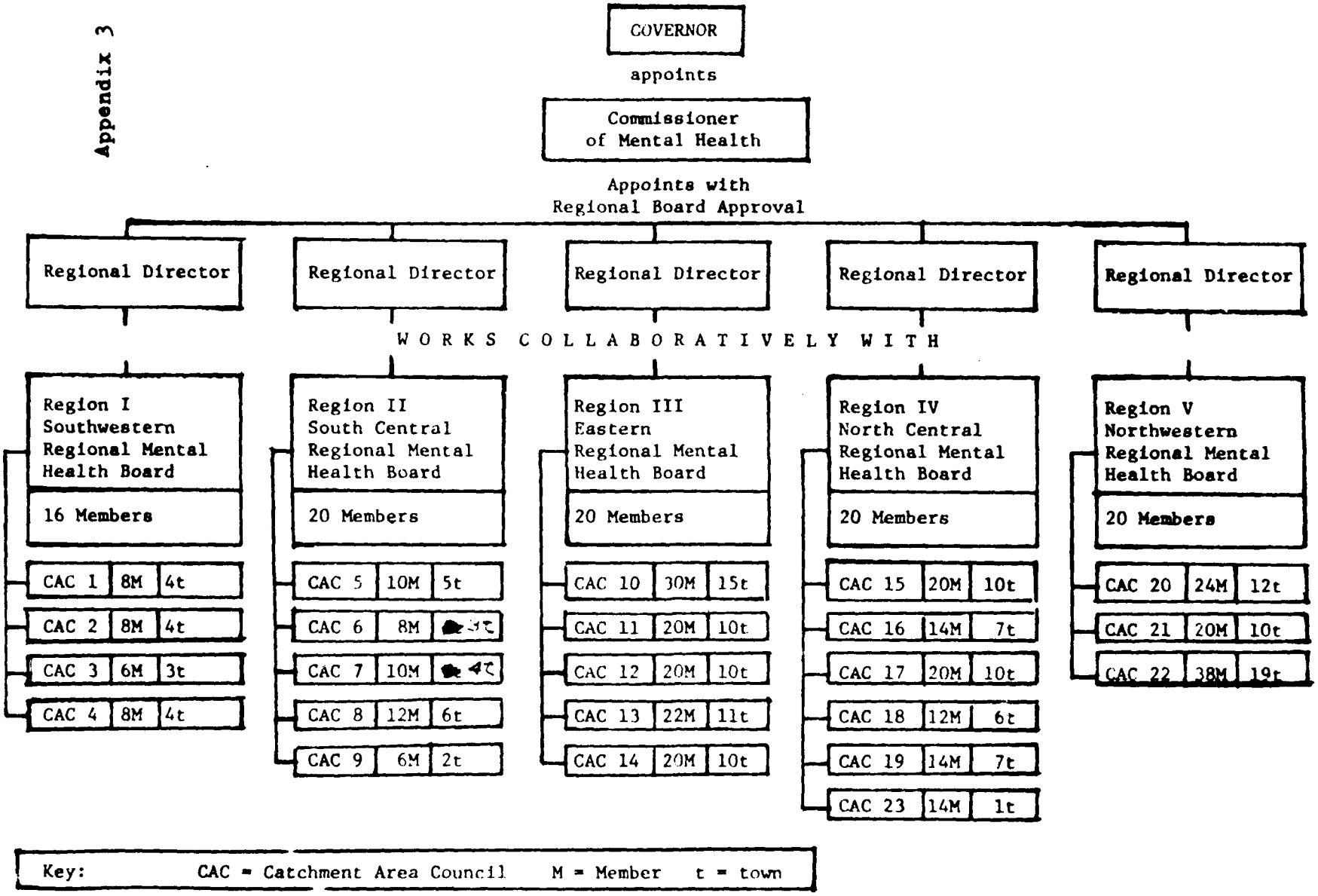
4/81

Prepared by DMH
Office of Planning and Evaluation

Appendix 2

CONNECTICUT MENTAL HEALTH SERVICES ACT:
GENERAL STATUTES, SECTION 17-226 THROUGH 17-226L

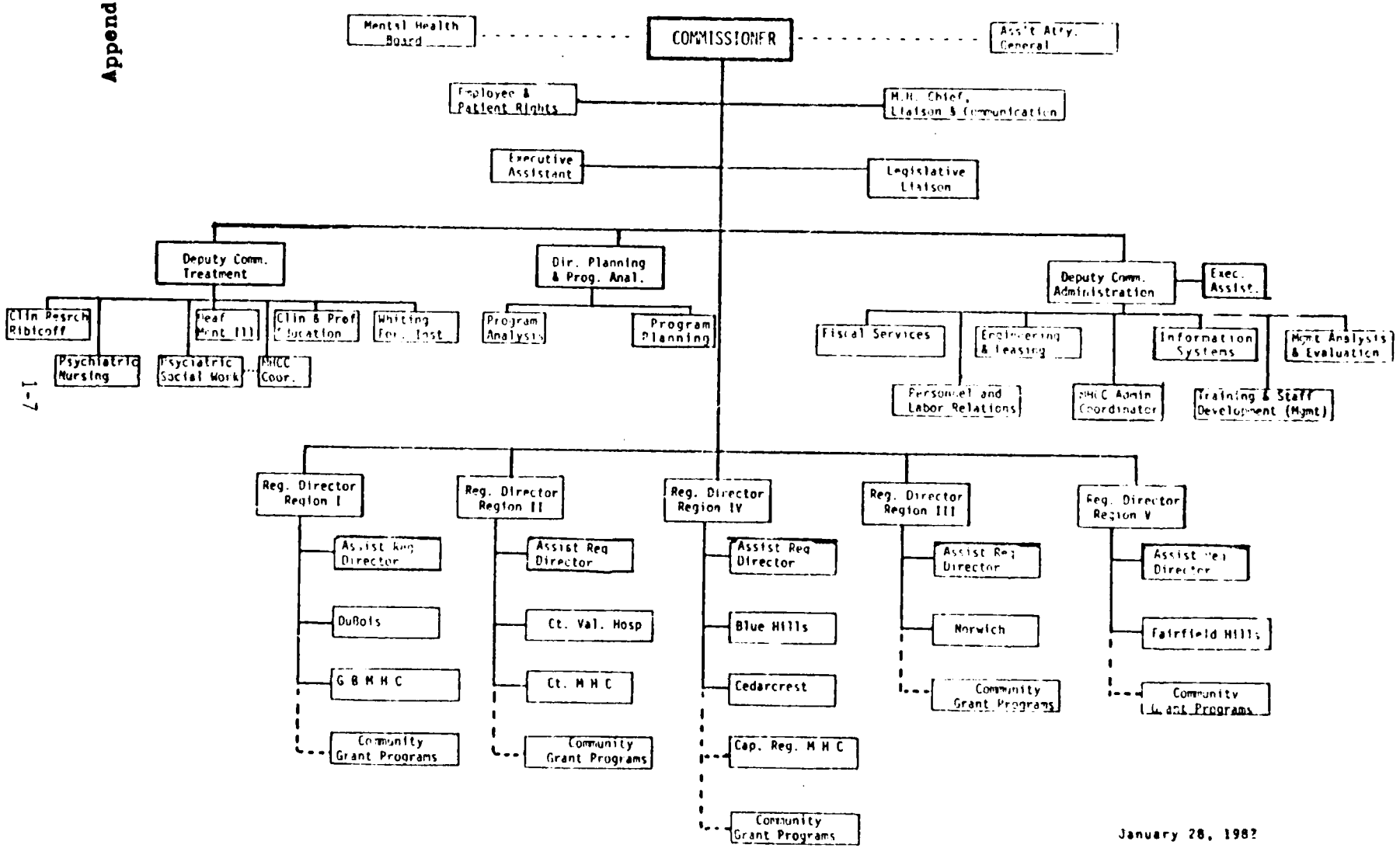
Appendix 3



Key: CAC = Catchment Area Council M = Member t = town

Appendix 4

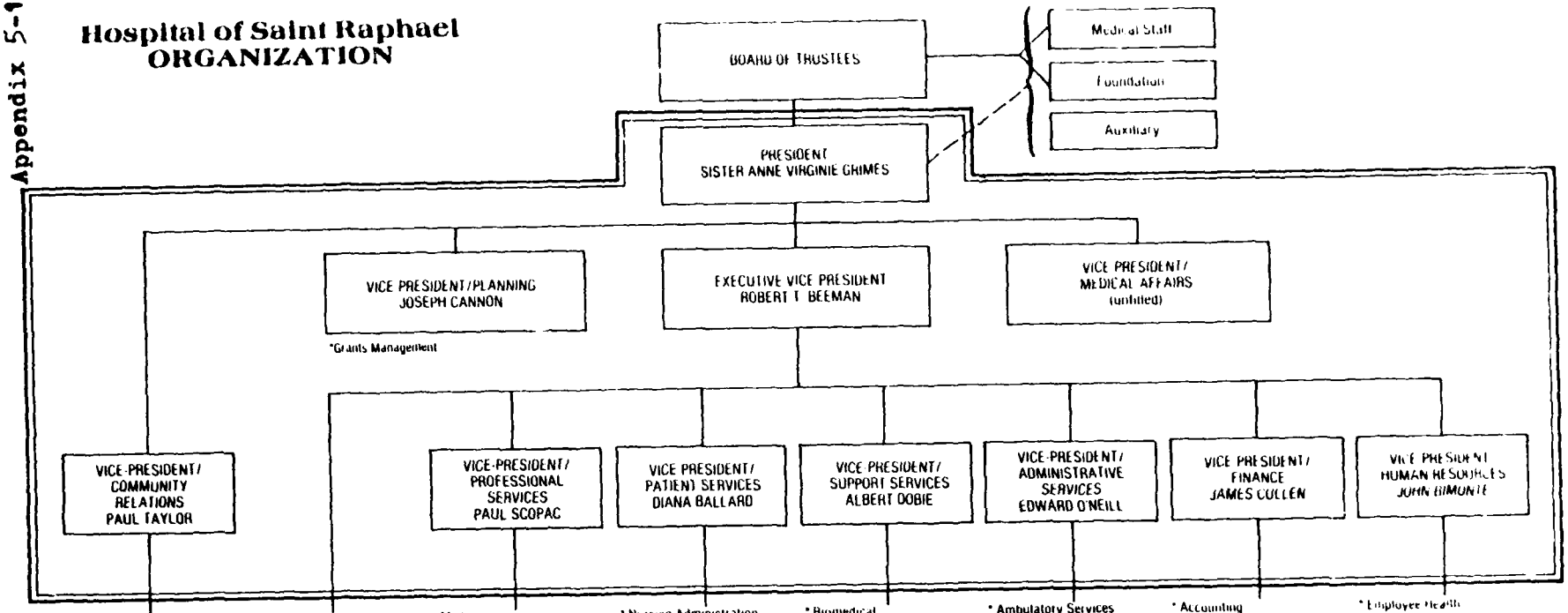
CONNECTICUT DEPARTMENT OF MENTAL HEALTH



January 28, 1982

Appendix 5-1

Hospital of Saint Raphael
ORGANIZATION



- "Better Health" Magazine
- Medical & General Photography
- Patient Relations
- Public Information
- Tel-Med

- Administrative Office Coordinator
- Chairman of Anesthesiology
- Chairman of Obs-Gyn
- Chairman of Pediatrics
- Chairman of Surgery

- Medicine
  - Cardiac Catheterization Lab
  - Cardiac Diagnostic Unit
  - Electrocardiography
  - Electroencephalography
  - Epidemiology/ Infection Control
  - Gastroenterology Laboratory
  - Physical Medicine & Rehabilitation
  - Pulmonary Diseases Laboratory
  - Respiratory Therapy
  - Respiratory Therapy School
- Pathology
  - Medical Laboratories
- Pharmacy Service
- Radiology
  - Diagnostic Radiography
  - Nuclear Medicine
  - Radiation Therapy
  - Radiologic Technology School
  - Ultrasound Services
- Risk Management & Loss Control

- Nursing Administration
- Nursing Staff Development
- Ambulatory Care Nursing
- Critical Care Nursing
- Medical-Surgical Nursing
- Obstetrical-Newborn Nursing
- Operating & Recovery Room Nursing
- Pediatric Nursing
- Psychiatry
- Renal Dialysis

- Biomedical Engineering
- Building Services
  - Engineering
  - Maintenance
- Dietary
- Fire Marshal
- Housekeeping
  - Laundry Distribution
  - Groundskeeping
- Materials Management
  - Central Supply
  - Purchasing
  - Receiving & Stores
- Parking
- Security

- Ambulatory Services
  - Emergency Room
  - Clinics
  - Primary Care
  - WIC Program
- Communications Systems
  - EMS
  - Mail
  - Copy Center
  - Motor Service
  - Switchboard
  - Reception
- Continuing Care
- Data Processing
- Management Engineering
- Health Sciences Library
- Medical Records
- Pastoral Care
- Social Services
- Utilization
- Volunteers

- Accounting
- Accounts Payable
- Admitting & Registration
- Billing
- Budgets & Costs
- Cashier
- Credit & Collections
- Payroll

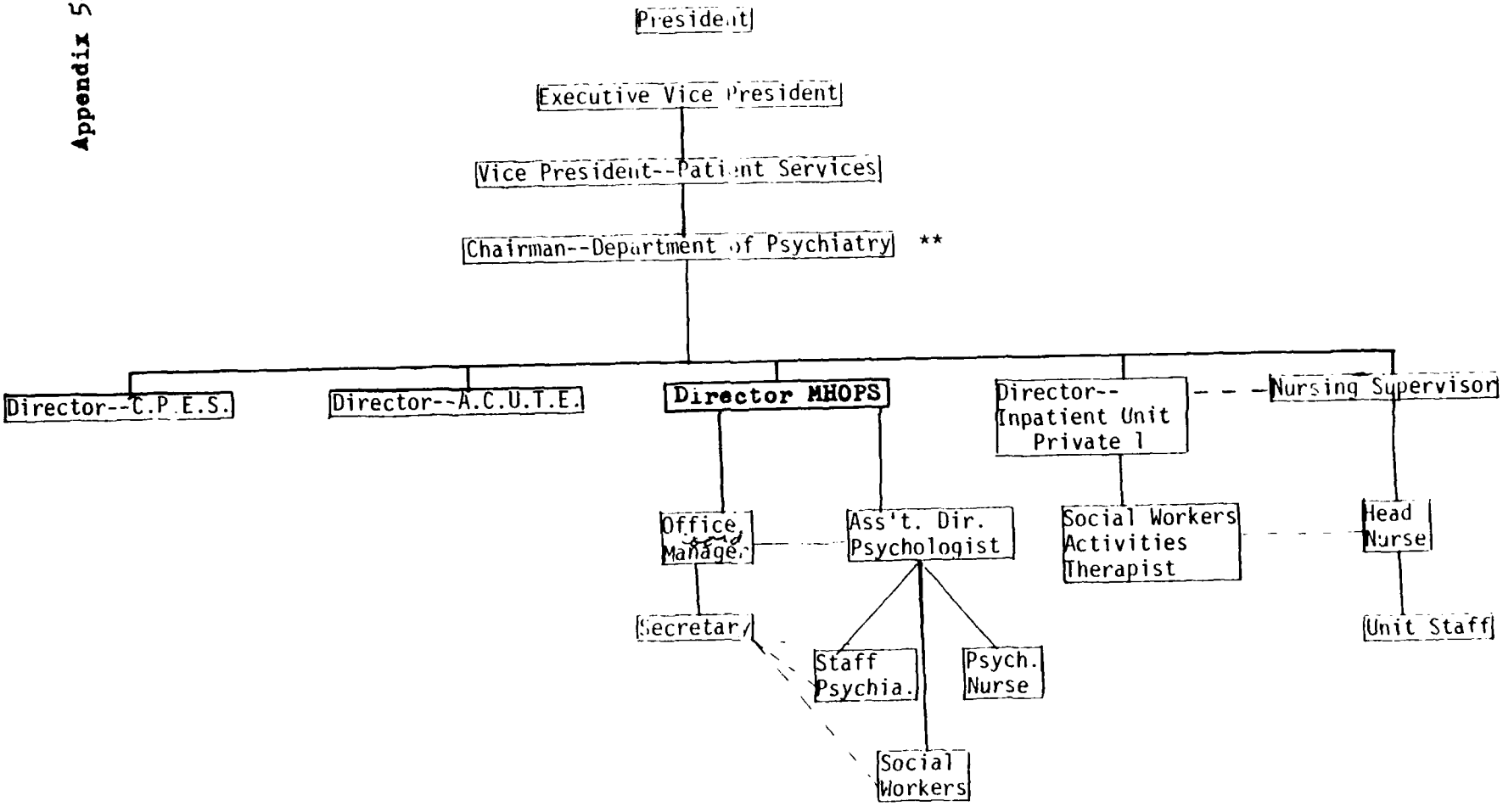
- Employee Health
- Hospital Education & Training
- Personnel

NOTE ═══ denotes Administrative Council

Appendix 5-2

THE HOSPITAL OF ST. RAPHAEL

DEPARTMENT OF PSYCHIATRY



LEGEND: - - - - coordinating and cooperating

** will report clinically to Vice President of Medical Affairs when that position is filled

/81

ADMISSION FORM*

Appendix 6-1

1 ADMISSION OR ACTION: FIRST | RE | U | C | D FORM

2 FACILITY NAME | 3 FAC CODE | 4a WARD UNIT | 4t STATUS | 5 CONSECUTIVE NO

6 CASE NUMBER OR ID NUMBER | 7 SEX | 8 AGE | 9 DATE OF BIRTH month-day-year | 10 LEGAL STATUS (inpatients only) | 11 LEGAL STATUS DATE month-day-year | 12 ADMISSION DATE month-day-year

3 NAME last | first | middle initial | maiden name | 4c CATCH AREA

4b USUAL ADDRESS no. and street or rd | city, town or village | state | zip code | county | 14c ADDRESS CODE

15 SOCIAL SECURITY NO | 16 OCCUPATION | 17 NAME AND LOCATION OF LAST PSYCHIATRIC OR RETARDATION FACILITY OR SERVICE

MARK ONLY ONE CHOICE EXCEPT AS SPECIFIED—USE ONLY NO. 2 PENCIL

18 CONSECUTIVE NUMBER

0 1 2 3 4 | 5 6 7 8 9

0 1 2 3 4 | 5 6 7 8 9

0 1 2 3 4 | 5 6 7 8 9

0 1 2 3 4 | 5 6 7 8 9

0 1 2 3 4 | 5 6 7 8 9

0 1 2 3 4 | 5 6 7 8 9

0 1 2 3 4 | 5 6 7 8 9

19 ACTION CODE 1st Re U C D Form

20 EMERGENCY Yes No

21 VETERAN Yes No

22 CITIZENSHIP U.S. Other

23 ENVIRONMENT
Farm | City Village | Rural Non-farm | Unknown

24 RELIGION
Protestant | Roman Catholic | Jewish
None | Other | Unknown

25 ETHNIC GROUP
White | Negro | American Indian | Puerto Rican
Oriental | Other | Unknown | (1) See Instructions

26 PRESENT MARITAL STATUS
Never Married | Married | Remarried | Separated
Divorced Annulled | Widowed | Unknown

27 HOUSEHOLD COMPOSITION Mark ALL which apply:
Lives Alone | With Children | With Others
With Spouse | With Siblings | In Institution
With Parents | With Other Relatives | Unknown

28 EDUCATION HIGHEST GRADE COMPLETED

29 WEEKLY FAMILY INCOME (Average Net Dollar)

NO. OF INDIVIDUALS ON FAMILY INCOME

30 FACILITY CODE

0 1 2 3 4 | 5 6 7 8 9

0 1 2 3 4 | 5 6 7 8 9

0 1 2 3 4 | 5 6 7 8 9

31 SOURCE OF REFERRAL
Self | Mental Health Center | Institution for Retardation
Family or Friend | Mental Hospital | Other Retardation Facility
Clergy | General Hosp. Psychiatric Unit | Court or Correction Agency
School | General Hosp. Other Unit | Public Health or Welfare Agency
Police | Nursing Home | Division of Vocational Rehabilitation
Private Psychiatrist | Psychiatric Clinic | Voluntary Agency
Other Private Physician | Other Psychiatric Facility | Other

32 TIME SINCE LAST PSYCHIATRIC OR RETARDATION SERVICE | LAST SERVICE WAS

CODE FOR LAST FACILITY OR SERVICE

0 1 2 3 4 | 5 6 7 8 9

0 1 2 3 4 | 5 6 7 8 9

33 PRIOR PSYCHIATRIC OR RETARDATION FACILITY OR SERVICE
Mark ALL which apply

INPATIENT	ALL OTHER	
This Facility	This Facility	Private Psychiatrist
Mental Hospital	Mental Health Center	Other Private Physician
Mental Health Center	Nursing Home	Retardation Facility
General Hospital	Psychiatric Clinic	School Psychologist
V.A. Hospital	Partial Hospital	Halfway House
Institution for Retardation	Psychiatric Emergency Service	Psychiatric Unit
Other	Other Psychiatric Facility	

34 PROBLEM APPRAISAL (Mark ALL which apply)
Consider 2 wks. preceding interview

PHYSICAL FUNCTION DISTURBANCE
Sleep Problems
Eating Problems
Physical Scoring
Seizures Convulsions
Speech Articulation Problems
Other Physical Problems

INTELLECTUAL DEVELOPMENT
Inadequate

SOCIAL RELATIONS DISTURBANCE
With Mate Spouse
With Other Family
With Other People

SOCIAL PERFORMANCE DISTURBANCE
Job
School
Housekeeping

OTHER SIGNS AND SYMPTOMS
Suicidal Thoughts
Suicidal Acts Gestures
Anxiety Fears Phobias
Obsessions Compulsions
Depressed Mood Intensity
Somatic Concerns Hypochondriasis
Social Withdrawal Isolation
Dependency Clinging
Grandiosity

Suspicion Persecution
Delusions
Hallucinations
Anger Belligerence Negativism
Assaultive Act
Alcohol Abuse
Sexual Problems
Narcotics Other Drugs
Anti Social Attitude Acts
Agitation Hyperactivity
Disorientation Impaired Memory
Speech Disorg. Incoherence
Slowed up Lack of Emotion
Inappropriate Affect Appearance Behavior
Daily Routine Leisure Time Impair.

35 OVERALL SEVERITY OF CONDITION

36 PROBLEM DURATION (ESTIMATE)

37 WRITE PSYCHIATRIC DIAGNOSIS OR IMPRESSION
Include Code for APA Manual Used

COMPLETED BY | DATE

TERMINATION FORM*

Appendix 6-2

1 ADMISSION OR ACTION	2 FACILITY NAME	3 FAC CODE	4a WARD UNIT	4b STATUS	5 CONSECUTIVE NO

6 CASE NUMBER OR ID NUMBER	7 SEX	8 AGE	9 DATE OF BIRTH month day year	10 LEGAL STATUS inpatients only	11 LEGAL STATUS DATE month day year	12 ADMISSION DATE month day year

13 NAME last	first	middle initial	maiden name	14a CATCH AREA

14b USUAL ADDRESS no and street or rd	city, town or village	state	zip code	county	14c ADDRESS CODE

15 SOCIAL SECURITY NO	16 OCCUPATION	17 NAME AND LOCATION OF LAST PSYCHIATRIC OR RETARDATION FACILITY OR SERVICE

MARK ONLY ONE CHOICE EXCEPT AS SPECIFIED—USE ONLY NO. 2 PENCIL

18 CONSECUTIVE NUMBER

0 1 2 3 4 5 6 7 8 9 (7 rows)

18-1 ACTION CODE — NEW — CORRECT — DELETE TRANSACTION

19 DATE OF TERMINATION

Month: JAN FEB MAR APR MAY JUN JULY AUG SEPT OCT

Year: 80 81 82 NO DE

Day

20 TIME BETWEEN FIRST INTERVIEW AND SUBSEQUENT TREATMENT OR SERVICE

TIME BETWEEN DATE OF LAST VISIT AND DATE OF TERMINATION

22 TYPE OF SERVICE Mark ALL which apply

- Intake Only
- Group Sessions
- Electric Shock Therapy
- Diagnosis or Evaluation Only
- Drug Therapy
- Services thru Collateral
- Individual Therapy
- Rehabilitative Services
- Other
- Family Group Sessions
- Education or Training

23 NUMBER OF VISITS by patient client and or collateral

- To Outpatient
- To Day Hospital
- To Day Training Center
- To Rehabilitation Center or Sheltered Workshop
- By Facility Staff at Other Locations
- Other

24 MENTAL LEVEL Mark either A or B

A Tested IQ — Profound Severe Retarded Mod Mild Border Aver Bright Super

B If Not Tested Enter Impression

26 FACILITY CODE

0 1 2 3 4 5 6 7 8 9 (3 rows)

27 DISPOSITION OF CASE Mark Either A B C or D

A Patient Withdrew Facility Notified — Moved or Ill — Died — Other Reason

B Patient Withdrew Facility Not Notified

C Terminated by Facility Without Referral — No Further Care Indicated — Further Care Indicated But Unavailable

D Terminated by Facility With Referral Mark ALL which apply — Mental Hospital — Nursing Home — Mental Health Center — Residential Treatment Center — General Hospital Psychiatric Unit — General Hospital Other — Retardation — Other Retardation Facility

PRIMARY DIAGNOSIS

2 3

0 1 2 3 4 5 6 7 8 9 (4 rows)

SECONDARY DIAGNOSIS Use APA Manual

2 3

0 1 2 3 4 5 6 7 8 9 (4 rows)

COMPLETED BY — DATE

Department of Mental Health

Working Definitions of DMH Target Populations

CHRONICALLY MENTALLY ILL

Appendix 7-1

"Chronically mentally ill person" means an individual age 18 or older who meets each of the following four (4) criteria.

CRITERION I, PSYCHIATRIC HISTORY: ONE (1) OF THE FOLLOWING MUST APPLY:

(1) Has been hospitalized for a psychiatric disorder for a continuous period of six (6) months or longer within the past ten (10) years.

(2) Has been admitted to a psychiatric inpatient unit three (3) or more times in the past two (2) years for treatment of a psychiatric disorder.

(3) Has spent more than three (3) months' cumulative time in a hospital for treatment of a psychiatric disorder in the past three (3) years.

(4) Has required supportive or supervised living for a period exceeding two (2) months as a result of a psychiatric disorder.

(5) Has required extensive treatment and community support services such as day treatment, other partial hospitalization, daily clinic visits, frequent emergency room visits, case management, psychosocial club activities, and supportive housing for a period of two (2) or more months during the last two (2) years, as a result of a psychiatric disorder.

CRITERION II, ROLE DISTURBANCE: SIGNS AND SYMPTOMS OF A PSYCHIATRIC DISORDER MUST BE OF SUFFICIENT SEVERTIY TO CAUSE CURRENT DISTURBANCE IN ROLE PERFORMANCE OR COPING SKILLS IN AT LEAST THREE (3) OF THE FOLLOWING AREAS:

(1) Vocational or academic: as a direct result of signs and symptoms, the person is unable to work or attend school has experienced gross diminution in academic or vocational performance, or is facing imminent extrusion from job or school.

(2) Family: as a direct result of signs and symptoms, the person's ability to carry out usual roles and functions in the family is grossly impaired, there is gross familial disruption, or the person faces imminent extrusion from the family

1. Source: Adapted from Division of Mental Health and Developmental Services, New Hampshire.

(3) Social/recreational: as a direct result of signs and symptoms, the person has become isolated, has no friends or peer group, and has lost or failed to acquire the capacity to pursue recreational or social interests.

(4) Residential: as a direct result of signs and symptoms, the person is at risk of losing his/her current residence or has already lost it.

(5) Legal: as a direct result of signs and symptoms, the person is engaging in activities that clearly will lead to difficulties with the criminal justice system.

(6) Financial: as a direct result of signs and symptoms, the person is unable to support him/herself or manage his/her finances without assistance.

(7) Community: as a direct result of signs and symptoms, the person is causing disturbances in the community because of poor judgement, antisocial, bizarre or intrusive behavior.

CRITERION III, SOCIAL SUPPORT SYSTEM: ONE (1) OF THE FOLLOWING MUST APPLY:

(1) In the absence of service functions carried out by the program, the person will exhibit a deteriorating clinical course (e.g., reduction in level of functioning) which would lead to hospitalization, psychiatric emergencies, confinement in jail, or the need for other restrictive forms of care.

(2) The person lacks a support system which is adequate to restore him/her to his/her previous level of functioning in the absence of service functions carried out by the program.

CRITERION IV: OTHER DIAGNOSES: A PERSON SHOULD BE EXCLUDED FROM MEMBERSHIP IN IN THE CHRONIC TARGET POPULATION IF THEIR PRINCIPAL DIAGNOSIS IS ONE (1) OF THE FOLLOWING:

(1) Mental Retardation

(2) Alcoholism

(3) Drug Abuse

Note: It needs to be recognized that patients with these diagnoses can have significant psychological problems requiring treatment with intervention. Therefore before excluding patients with these diagnoses care must be taken to insure not only that another psychiatric diagnosis is the principal diagnosis but also that the mental retardation or substance abuse diagnosis reflects sufficient severity to require treatment in other specialized settings.

AT RISK OF HOSPITALIZATION (1)

Appendix 7-3

"At risk of hospitalization" means an individual age 18 or older who meets each of the following three (3) criteria:

CRITERION I, PSYCHIATRIC: TWO (2) OR MORE OF THE FOLLOWING SIGNS AND SYMPTOMS MUST BE PRESENT AS MANIFESTATIONS OF A PSYCHIATRIC DISORDER:

(1) Serious attempts, gestures, or threats of suicide.

(2) Assaultive or explosive behavior or serious threats to harm others.

(3) Gross confusion, disorientation, memory loss, and lack of judgement.

(4) Active and distracting hallucinations.

(5) Grossly delusional

(6) Grossly disorganized thought.

(7) Grossly bizarre behavior.

(8) Severe psychomotor retardation, agitation, or hyperactivity.

(9) Grossly inappropriate or grossly blunted affect.

(10) Unable to care for self; failure to get life treatment will result in severe deterioration of medical condition or will create life or limb-threatening condition.

(11) Severe weight loss (20 pounds or more) not as a result of a planned and appropriate diet.

(12) Severe disturbance of mood or affect.

CRITERION II, ROLE DISTURBANCE: SIGNS AND SYMPTOMS OF A PSYCHIATRIC DISORDER MUST BE OF SUFFICIENT SEVERITY TO CAUSE CURRENT DISTURBANCE IN IN ROLE PERFORMANCE OR COPING SKILLS IN AT LEAST TWO (2) OF THE FOLLOWING AREAS:

(1) Vocational or academic: as a direct result of signs and symptoms, the person is unable to work or attend school, has experienced gross diminution in academic or vocational performance, or is facing imminent extrusion from job or school.

1. Source: Adapted from Division of Mental Health and Developmental Services, New Hampshire.

(2) Family: as a direct result of signs and symptoms, the person's ability to carry out usual roles and functions in the family is grossly impaired, there is gross familial disruption, or the person faces imminent extrusion from the family.

(3) Social/recreational: as a direct result of signs and symptoms, the person has become isolated, has no friends or peer group, and has lost or failed to acquire the capacity to pursue recreational or social interests.

(4) Residential: as a direct result of signs and symptoms, the person is at risk of losing his/her current residence or has already lost it.

(5) Legal: as a direct result of signs and symptoms, the person is engaging in activities that clearly will lead to difficulties with the criminal justice system.

(6) Financial: as a direct result of signs and symptoms, the person is unable to support him/herself or manage his/her finances without assistance.

CRITERION III, SOCIAL SUPPORT SYSTEM: ONE (1) OF THE FOLLOWING MUST APPLY:

(1) In the absence of service functions carried out by the program, the person will exhibit a deteriorating clinical course (e.g., reduction in level of functioning) which would lead to hospitalization, psychiatric emergencies, confinement in jail, or the need for other restrictive forms of care.

(2) The person lacks a support system which is adequate to restore him/her to his/her previous level of functioning in the absence of service functions carried out by the program.

POOR

Appendix 7-5

"Poor" means an individual age 18 or older who meets the following criterion:

CRITERIA I: THE FOLLOWING MUST APPLY:

(1) Total family income does not exceed 150% of the amount defined by the Federal Government as the poverty level (see table below)

Federal Guidelines for Poverty level gross family income April 1982[1]

Family Unit (persons)	NonFarm		Farm	
	$	150%	$	150%
1	4630	7020	4010	6015
2	6220	9330	5310	7965
3	7730	11640	6610	9915
4	9300	13950	7910	11865
5	10840	16260	9210	13815
6	12330	18570	10510	15765
add for each additional person	1540	2310	1300	1950

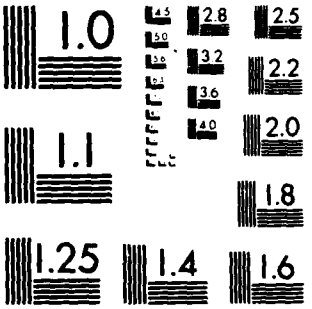
1. Used in all states except Alaska and Hawaii. Revised annually in the Spring

Source: Department of Income Maintenance (original source Federal Register, April, 1982).

214-6
6-83

AD-A142 798 AN ADMINISTRATIVE ANALYSIS OF A HOSPITAL BASED MENTAL HEALTH OUTPATIENT SERVICE: A CASE STUDY(U) AIR FORCE INST OF TECH WRIGHT-PATTERSON AFB OH R F WELTZIN 1984 2/2

UNCLASSIFIED AFIT/CI/NR-84-29T F/G 6/5 NL



83 (OUTP17)

7.2.83
Reflects
6.30.83

THE HOSPITAL OF ST. RAPHAEL

TRIAL BALANCE SUMMARY (PSY CLN)

	FC	90 DAYS +	60 DAYS	30 DAYS	CURRENT	TOTAL
Self Pay	A	23,986.94	3,366.90	4,808.50	5,607.61	37,769.95
State Welfare	D	2,920.18	1,265.35	944.86	47,185.47	52,315.86
City Welfare	E	382.11	482.60	124.00	7,966.27	8,954.98
Problems	H	17,813.44	2,649.00	4,769.00	4,069.00	29,300.44
Medicare	M	2,180.33	206.10	408.95	17,519.76	20,315.14
Blue Cross	N	211.20	150.00	260.00	3,928.00	4,549.20
Employee	1				285.00	285.00
TOTALS		47,494.20	8,119.95	11,315.31	86,561.11	153,490.57

Appendix 8

Appendix 9-1

PATIENT CLASSIFICATION SCALE

Effective October 1, 1982

Classification	Family Members 1	2	3	4	5	6	7	8	9	10
A	247.00	271.00	295.00	317.00	341.00	363.00	387.00	411.00	433.00	457.00
B	194.00	217.00	240.00	263.00	286.00	310.00	333.00	356.00	379.00	402.00
C	170.00	194.00	217.00	240.00	263.00	286.00	310.00	333.00	356.00	379.00
D	147.00	170.00	194.00	217.00	240.00	263.00	286.00	310.00	333.00	356.00
E	124.00	147.00	170.00	194.00	217.00	240.00	263.00	286.00	310.00	333.00
F	101.00	124.00	147.00	170.00	194.00	217.00	240.00	263.00	286.00	310.00
G	77.00	101.00	124.00	147.00	170.00	194.00	217.00	240.00	263.00	286.00

Use to determine patient financial classification based upon <u>gross</u> family income.

Appendix 9-2

PATIENT FEE SCHEDULE

	A	B	C	D	E	F	G
Individual	45.00	40.00	35.00	30.00	23.00	17.00	10.00
Group	28.00	22.00	20.00	16.00	14.00	12.00	8.00
Medication	26.00	23.00	20.00	18.00	16.00	14.00	8.00
Intake	58.00	54.00	50.00	48.00	45.00	43.00	40.00

Intake appointment always recorded as $58.00.

ALLOCATION PLAN
MAXIMUM FAMILY INCOME — GROSS

Size of Family Unit*	100% Free Medical Care Category A	% Free Medical Care Category B
1	$4,860	$ 4,861 — $ 7,292 — 50%
		7,293 — 9,722 — 25%
2	6,540	6,541 — 9,811 — 50%
		9,812 — 13,082 — 25%
3	8,220	8,221 — 12,331 — 50%
		12,332 — 16,442 — 25%
4	9,900	9,901 — 14,851 — 50%
		14,852 — 19,802 — 25%
5	11,580	11,581 — 17,371 — 50%
		17,372 — 23,162 — 25%
6	13,260	13,261 — 19,891 — 50%
		19,892 — 26,522 — 25%
7	14,940	14,941 — 22,411 — 50%
		22,412 — 29,882 — 25%
8	16,620	16,621 — 24,931 — 50%
		24,932 — 33,242 — 25%

*For family units with more than eight members, add $1,680 for each additional member.

IF YOU THINK THAT YOU ARE ELIGIBLE FOR THESE SERVICES, PLEASE CONTACT BUSINESS SERVICES (789-3128) MONDAY THROUGH FRIDAY, BETWEEN 9 A.M. AND 5 P.M. TO MAKE APPLICATION. THE BUSINESS SERVICES OFFICE IS LOCATED IN ST. JOSEPH'S BUILDING—FOURTH FLOOR.

S/M (3-30-83)

(SEE OVER)

Appendix 11

HOSPITAL OF ST. RAPHAEL
BUDGET VARIANCE REPORT

DEPTS : STANDARD : 858 PSYCHIATRIC CLINIC

CURRENT					YEAR TO DATE			
ACTUAL	BUDGET	VARIANCE	PERCENT	PERIOD ENDING 6/30/83	ACTUAL	BUDGET	VARIANCE	PERCENT
				REVENUE:				
13,412	12,540	872	7.0	203 ROUTINE O/P	138,676	109,783	28,893	26.3
				EXPENSE:				
16,425	15,938	487	3.1	1 SALARY + WAGE	147,098	141,872	5,226	3.7
16,425	15,938	487	3.1	**TOTAL LABOR**	147,098	141,872	5,226	3.7
				349 STAFF REPLACEMENT	696		696	
1	25	(24)	(96.0)	415 PRINTED FORMS	82	225	(143)	(63.6)
5		5		416 STATIONARY	43	125	(82)	(65.6)
(9)	50	(59)	(118.0)	417 OFFICE SUPPLIES	238	500	(262)	(52.4)
810		810		516 MINOR EQUIPMENT	2,566		2,566	
				517 M/S SUPP OTHER	32		32	
68	20	48	240.0	542 BOOKS + PUBLICATION	335	180	155	86.1
2,904		2,904		575 RENT	~~8,712~~ 26,136		8,712	
50		50		581 SUBSCRIPTNS+PERIODI	123	165	(42)	(25.5)
34		34		582 TRAVEL	737		737	
3,448		3,448		584 REPAIRS + MAINT EQU	~~3,611~~ - out	150	3,461	2,307.3
				598 PURCH SUPPLIES	139	600	(461)	(76.8)
	10	(10)	(100.0)	599 MISCELLANEOUS	10	90	(80)	(88.9)
13		13		650 DIETARY SERVICES	107		107	
(1)		(1)		708 EDUCATIONAL EXPENSE	115	1,880	(1,765)	(93.9)
7,323	105	7,218	6,874.3	**TOTAL MS**	~~17,546~~ 31,359	3,915	13,631	348.2
23,748	16,043	7,705	48.0	***TOTAL EXPENSE***	~~164,644~~ 178457	145,787	18,857	12.9
(10,336)	(3,503)	(6,833)	195.1	***CONTRIBUTION***	(25,968)	(36,004)	10,036	(27.9)
				STATISTIC VALUES:				
1744.00	1700.00	44.00	2.59	850 CLINIC VISITS	14405.00	15200.00	(795.00)	(5.23)
7.69	7.38	0.31	4.26	REVENUE PER STAT	9.63	7.22	2.40	33.29
9.42	9.38	0.04	0.46	LABOR PER STAT	10.21	9.33	0.88	9.41
4.20	0.06	4.14	6698.33	M+S PER STAT	1.22	0.26	0.96	372.91
13.62	9.44	4.18	44.29	EXPENSE PER STAT	11.43	9.59	1.84	19.17

BIOGRAPHICAL SKETCH

RICHARD F. WELTZIN JR., MAJOR, U.S.

AIR FORCE, MEDICAL SERVICE CORPS

1967-1971	University of Maine, Orono, Maine, B.S. Business Administration
1972-1976	Missile Combat Crew Commander Instructor, 321st Strategic Missile Wing, Grand Forks Air Force Base, North Dakota
1972-1974	University of North Dakota, Grand Forks, M.B.A.
1976	USAF School of Health Care Sciences, Health Services Administration, Sheppard AFB, TX
1976-1977	Assistant Administrator for Plant Management, USAF Medical Center Scott, Scott AFB, Illinois
1977-1978	Medical Squadron Commander USAF Medical Center Scott, Scott AFB, Illinois
1978-1979	Assistant Administrator for Medical Systems Analysis, USAF Medical Center Scott, Scott AFB, IL
1979-1980	Assistant Administrator for Resources Management, USAF Medical Center Scott, Scott AFB, IL
1980-1982	Director, Resource Management USAF Medical Center Scott, Scott AFB, IL
1982-1984	Yale University, School of Medicine, Department of Public Health, New Haven, CT, Candidate for Degree of Master of Public Health (Hospital Administration)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